CHAPTER 4

THE GOVERNMENT OF THE
HONG KONG SPECIAL ADMINISTRATIVE REGION

GENERAL REVENUE ACCOUNT

GOVERNMENT SECRETARIAT

Education and Manpower Bureau

Administration of the Quality Education Fund

Audit Commission
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ADMINISTRATION OF THE QUALITY EDUCATION FUND

Contents

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Summary and key findings

A.   **Introduction.** In September 1997, the Education Commission Report No. 7 on Quality School Education recommended the Government to set aside a fund to finance one-off projects for the improvement of education quality on a competitive basis. This fund would provide an effective means "to encourage bottom-up initiatives, and the opportunity for the community to participate in the building of quality culture" (para. 1.3).

B.   In December 1997, the then Provisional Legislative Council approved funding of $5 billion for the establishment of a Quality Education Fund (QEF) to make grants to projects for the promotion of quality education in schools. In January 1998, the QEF was established under a Trust with the Director of Education Incorporated as the Trustee. The QEF, administered by the QEF Secretariat within the Education and Manpower Bureau (EMB), has two streams of activities: a Grants Programme and an Awards Programme. The Grants Programme provides financial assistance to a range of projects submitted from all sectors of education. Up to August 2001, the QEF had approved grants totalling about $2.8 billion (or $640,000 per successful application). The Awards Programme aims to give recognition to schools with excellent practices and performance through the Outstanding Schools Award (OSA) scheme (paras. 1.4 to 1.13).

C.   **Audit review.** Audit has conducted a review of the administration of the QEF (para. 1.14). The audit findings are summarised in paragraphs D to Q below.

D.   **Strategic planning.** The QEF provides grants to five major categories of projects (Effective Learning, All-round Education, School-based Management, Information Technology and Educational Research). At the end of 2000, two special categories of grants were added (i.e. grants to public sector schools for the capital cost of air-conditioning for classrooms and libraries and for the purchase of notebook computers for loan to needy secondary students). The addition of these two special categories of grants has resulted in significant changes to the allocation of funding. Despite having approved grants totalling billions, the QEF does not have a strategic plan to guide its activities. The QEF needs to formulate an overarching strategic plan. The main benefit of the strategic plan is that specific outcomes are targeted. Performance measurement against the strategic plan will show the future direction of programme funding (paras. 2.2 to 2.8).

E.   Without an overarching strategic plan and with the same trend of funding, it is probable that the Grants Programme will be subsumed by the standard projects (see para. F below). The QEF would also become an Education Department's supplementary funding source for school education (see para. G below). This would defeat the original objective of the QEF of funding "worthwhile initiatives on a pilot basis and one-off projects that aim to raise the quality of school education". This would also be inconsistent with the recommendation of the Education Commission that the QEF should

fund "school-based innovative projects and experiments aimed to improve the quality of education at all levels" (para. 2.21).

F.   **Standard projects.**   Some projects have been standardised by the QEF Secretariat partly because of their popularity and success, and partly because of a desire to streamline the selection processes.   The standard projects in the first four calls included: Reading Schemes (150 projects), School Orchestras (155 projects), Parent Resource Centres (183 projects) and Multi-media Learning Centres (313 projects).   Following the addition of the two special standard grants for air-conditioning and for notebook computers, the number of standard projects has increased substantially.   Standard projects absorbed 40% of the funding in the fourth call of the QEF.   If funding for standard projects continues to increase, it is conceivable that they could take up a very large share of the QEF funding (paras. 2.11 to 2.16).

G.   **A supplementary fund-provider.**   The QEF has been used by the Education Department (ED) as a supplementary source of funding for schools.   For the Information Technology Coordinators projects of 250 schools, funding was initially provided under the Government's annual budgetary process.   However, to extend the scheme to other schools, the ED successfully applied twice from the QEF's total funding of $238 million, instead of through the Government's annual budgetary process.   Similarly, to extend the upgrading of the Multi-media Learning Centres scheme to "one-student-one-computer" basis for 102 subsidised secondary schools, the ED successfully applied $31.7 million from the QEF, instead of using funds from the ED capital accounts (paras. 2.17 to 2.20).

H.   **Alternative funding.**   In Hong Kong, a wide range of alternative funding sources (including the QEF) are available for educational programmes and projects.   There appears to be very little synergy and coordination between these funding sources.   Some funding sources overlap in terms of their objectives and the type of projects that can be funded.   Such a variety of funding sources could be confusing to applicants and costly to administer (paras. 2.34 and 2.35).

I.   **Administration of the QEF.**   The QEF is administered by the QEF Secretariat within the EMB, which has mainly played the role of a fund provider.   To add more value, the QEF needs to take up the role of providing advisory services to the grant recipients.   Audit notes that the ED (instead of the EMB) is better placed to provide such services (paras. 2.38 to 2.41).

J.   **Guidelines for decision making.**   As most of the QEF Secretariat staff and members of the Steering Committee have been involved with the QEF for some time, corporate memory exists.   However, inconsistencies and changes may arise over time.   Clear and actionable documentation can minimise the risk of inconsistent decisions (paras. 3.2 and 3.3).

K.   **Processing of applications and project monitoring.**   The QEF Secretariat applies a high level of rigour in its approach to processing applications.   However, this has the downside of introducing process inefficiencies in that detailed information was required from the applicants.   Significant efforts were spent in budget trimming, multiple handling of application documentation and labour- and paper-intensive process.   It is necessary for the QEF to streamline the assessment

processes (paras. 3.6 to 3.8). In response to Audit enquiries, many grantees commented that considerable work was required to maintain frequent reporting on both the project progress and the budget expenditure (paras. 3.16 to 3.23).

L. **Link between fund management and the Grants Programme.** The Finance Committee paper of December 1997 has provided a general guideline that the QEF would adopt an investment approach in order to produce recurrent income to meet regular funding requests. Audit notes that there is no systematic and formal reporting process between the management of the Fund and of the Grants Programme. For the two financial years of the Fund covering the period 1 September 1998 to 31 August 2000, the actual expenditure for approved grants and expenses exceeded the QEF's recurrent income by about $110 million. There is a need to monitor closely the Fund's financial position so as to ensure that the recurrent income will be able to finance the recurrent expenditure (paras. 3.43 to 3.47).

M. **Performance measures.** The QEF conducts project evaluation by requiring grantees to submit periodical financial and progress reports, and a final evaluation report at the end of the project. However, the majority of the QEF's performance indicators measure inputs (e.g. use of resources, capital items purchased, and number of seminars held), as opposed to outputs and outcomes (e.g. whether the project delivers to recipients the intended real benefits). To further develop the monitoring and evaluation mechanism, the QEF needs to give priority to developing meaningful indicators and measures of outputs and outcomes, rather than inputs (paras. 4.2 to 4.12).

N. **Dissemination practices.** The main goal of disseminating what has been learned through the experience of QEF funded projects is being addressed. However, specific objectives for each element of the QEF dissemination strategy have not been spelt out (paras. 5.2 to 5.11). The QEF needs to take a strategic approach in dissemination at school level for innovative projects and professional development projects. It needs to take a proactive role in acquiring professional development from providers, funding the design and delivery of evaluation programmes and commissioning research to explore factors that influence learning outcomes (paras. 5.12 to 5.19).

O. **Large number of schools did not apply for QEF funding.** According to the QEF survey completed in July 2000, 44% of schools had not applied for any QEF funding. The main reason for not applying for a QEF grant was excessive paperwork. Furthermore, 71% of the respondents indicated that they were undecided or said that they would not apply for funding in the next call for applications (paras. 5.20 to 5.22).

P. **Outstanding Schools Award.** The results of the first OSA were announced by the QEF in July 2001. A total of 21 schools received 24 awards, including six OSAs and 18 Certificates of Merit. Audit notes that in advanced countries, while they use different criteria for judging the performance of schools deserving awards for excellence, the academic performance of students is a commonly-used criterion or indicator for assessing the performance of a school. The academic performance of students reflects the level of achievement or improvement in student learning attained by a school. However, in Hong Kong, it appears that the criteria used by the QEF to measure Students' Attainment make little reference to academic performance of students. Adequate recognition of the academic performance, or improvement in performance, is in keeping with the practices of advanced countries

of measuring outstanding schools. Audit considers that due weight should be given to the academic achievement of students in assessing schools for the OSA (paras. 6.2 to 6.20).

Q.   **Outstanding teachers award.**   In the Finance Committee paper of December 1997 approving the setting up of the QEF, it was stated that awarding excellence in the performance of teaching would effectively disseminate good practices and promote healthy competition across the teaching profession. It would also help maintain morale and enhance the esteem and social status of good teachers.   More than three years have lapsed since the establishment of the QEF in January 1998.   However, the development of an outstanding teachers award has not been completed (paras. 6.23 to 6.27).

R.   **Audit recommendations.**   Audit has made the following major recommendations that the Secretary for Education and Manpower should:

(a)   develop a strategic plan for the QEF and aim to use the QEF grants to create optimum value in the education system (para. 2.9(a) and (c));

(b)   undertake a review of the current "standard projects" to establish the costs, benefits and outcomes of these projects, so as to identify future standard projects that should receive QEF funding (para. 2.22(a));

(c)   in developing the strategic plan for the QEF, consider the optimum proportion of funds for allocating to standard projects, for fostering innovation and for providing supplementary facilities in schools (para. 2.22(c));

(d)   conduct a thorough review of various funding sources that are available for educational purposes in Hong Kong with a view to improving coordination and avoiding duplication of funding (para. 2.36);

(e)   consider transferring the administration of the QEF from the EMB to the ED so as to enhance the outcomes of the projects funded by the QEF (para. 2.42);

(f)   develop systematic documentation (such as procedural manuals and selection guidelines) so as to enable the QEF Secretariat to achieve greater consistency in decision making (para. 3.4(a));

(g)   streamline the assessment processes of funding applications, with a view to reducing the workload of the QEF Secretariat and shortening the time for processing applications (para. 3.9(a));

(h) undertake a risk assessment for devising a more cost-effective methodology for project monitoring, and find opportunities for project monitoring within the existing school audit practices (para. 3.24 (a) and (b));

(i) establish a formal reporting mechanism to monitor closely the level of annual expenditure against the financial position of the Fund, and set a formal budget for all aspects of QEF operation. Budget progress reports should be submitted regularly to the QEF Steering Committee (para. 3.48(a) and (b));

(j) develop guidelines on specific evaluation methodology for reference by applicants to assist them in preparing funding proposals (para. 4.16(a));

(k) require the submission of an explicit evaluation method and outcome measures in all funding applications and adopt these measures as key assessment criteria of applications. Applicants should be required to submit information on outcome performance indicators and performance measures to establish whether a project is successful with reference to its outcomes (para. 4.16(b));

(l) adopt a proactive role in funding worthwhile projects, undertake a review of the current dissemination activities to ensure that they are effective in capturing the useful experiences from funded projects, and formulate a more effective dissemination strategy (para. 5.24(a), (b) and (d));

(m) streamline the processing of project applications by reducing paperwork so as to encourage more schools to participate in such projects, and adopt an appropriate public relations strategy (para. 5.24(e) and (f));

(n) develop a plan to capture the learning that has been acquired through the OSA process, and consider taking into account the academic achievement of students in assessing schools for the OSA (para. 6.21 (a) and (d)); and

(o) take measures to introduce an outstanding teachers award at an early date and, in doing so, draw on the knowledge of local organisations and organisations in advanced countries (para. 6.28 (a) and (b)).

S. **Response from the Administration.** The Secretary for Education and Manpower welcomes the Audit Report. She will invite the QEF Steering Committee and the EMB to take them into account in considering the way forward for the QEF.

PART 1:   INTRODUCTION

1.1   This PART describes the background to the establishment of the Quality Education Fund (QEF) and the objectives of the audit review.

Background

1.2   The Government provides nine years of universal basic education as well as a range of supplementary educational programmes.   The Government is the primary provider of funds to the government and aided school sectors and provides some funding to other schools and kindergartens in particular circumstances.   Some 85% of subvented schools are run by community or religious organisations.   Through the Education Department (ED), funding is provided to schools under five budget programmes, namely primary education, secondary education, special education, departmental support (which includes school building programme and curriculum development) and other direct services and subventions (which include pre-primary and adult education programmes).

1.3   In September 1997, the Education Commission Report No. 7 (ECR7) on Quality School Education recommended that the Government set aside a substantial amount of money to establish a Quality Education Development Fund to fund "one-off projects for the improvement of education quality on a competitive basis".   The Education Commission (EC) stated that such a fund would *"...... help address public concern over the lack of adequate financial support and commitment to encourage quality initiatives.   It will also provide an effective means to encourage bottom-up initiatives, and the opportunity for the community to participate in the building of quality culture".*   The EC also recommended that, subject to close monitoring and periodic external evaluation, the Fund should fund:

   (a)   school-based innovative projects and experiments aimed to improve the quality of education at all levels;

   (b)   awards for outstanding performance of schools and teachers in any or all of the major domains of education;

   (c)   promotion of a wide range of extra-curricular activities to provide students with an all-round education;

   (d)   educational   researches   and   consultancies   undertaken   by   schools/educational bodies/individuals which may help address specific issues and problems of education;

   (e)   school-based training courses for key players to meet the needs of individual schools, groups of schools within the same quality circle or with similar background, in the development of quality school education; and

   (f)   institutional reviews to be carried out by outside experts to monitor the quality of schools and non-University Grants Committee funded institutions, and to disseminate good practices where appropriate.

1.4   In his October 1997 Policy Address, the Chief Executive announced the establishment of the QEF with funding of $5 billion to finance projects for the promotion of quality education in schools.   In December 1997, the then Provisional Legislative Council approved the funding of $5 billion.

1.5   In January 1998, the QEF was established.   Since its establishment, the QEF has assessed 11,259 applications and approved funding for 4,341 educational projects valued at $2.8 billion.   The dates of the calls for applications for funding were as follows:

	First call	**Second call**	**Third call**	**Fourth call**
Call announcement date	5 March 1998	30 September 1998	4 October 1999	30 October 2000
Closing date	30 April 1998	30 November 1998	30 November 1999	30 December 2000

QEF Programmes from 1998 to 2001

1.6   There are two streams of activities under the QEF: a Grants Programme and an Awards Programme.

Grants Programme

1.7   The first stream of activity is the Grants Programme, which provides financial assistance to a range of projects submitted annually from all sectors of education in the following five major categories:

(a)   *Effective Learning.*   Projects include subject-based curriculum development, language proficiency training, and learning and thinking skills;

(b)   *All-round Education.*   Projects include study trips, music, sport and cultural activities as well as personal growth and guidance proposals;

(c)   *School-based Management.*   Projects include home-school cooperation projects such as Parent Resource Centres for which template applications have been developed, and staff development;

(d)   *Information Technology (IT).*   Projects include computer-assisted teaching and learning, computer networking, and software development; and

(e)   *Educational Research.*   Projects include the establishment of school quality circles, or the development of performance indicators.

1.8   In December 2000, the QEF Steering Committee (see para. 1.11 below) endorsed two special categories of projects for public sector schools, namely:

(a)   grants for the capital cost of air-conditioning for classrooms and libraries of schools that could raise 50% of the cost themselves; and

(b)   grants to secondary schools for the purchase of notebook computers for loan to needy students.

Awards Programme

1.9   The second stream of activity is the Outstanding Schools Award (OSA), which aims to give recognition and encouragement to schools with excellent practices and performance. The OSA Programme was mooted in the original ECR7 proposal as awards for outstanding performance of schools.

1.10   All mainstream schools, including early childhood, primary, secondary and special schools, registered under the Education Ordinance (Cap. 279) and government schools, are eligible for nomination for the awards, for which there is no pre-set limit. Winners will receive a trophy, a certificate and a cash grant of $200,000 to be applied to further development of the school.

Framework of control for administering the QEF

1.11   The QEF Steering Committee was set up under the EC to advise on the policies and procedures of the QEF. The QEF's operation is guided by the Steering Committee, which is supported by a small secretariat of administrative and professional staff from the Education and Manpower Bureau (EMB). The Steering Committee is chaired by a non-official member of the EC and its members consist of non-official members representing the school sector, professionals, the business community, and government officials of the EMB and the ED. The QEF Steering Committee is assisted by:

(a)   an Assessment Subcommittee which assesses applications for funding; and

(b)   a Promotion and Monitoring Subcommittee which evaluates the effectiveness of the funded projects.

In addition to the QEF Steering Committee, the QEF Investment Committee is responsible for setting policies for the investment of the funds.

1.12   The QEF is administered, under a Trust, by the QEF Secretariat within the EMB. The Director of Education Incorporated is the QEF Trustee, who signs agreements with grantees of QEF projects.

Overview of QEF applications and funding

1.13   Up to the end of August 2001, the QEF received 11,259 applications in the first four calls. 4,341 (or 39%) applications were approved with a total funding of about $2.8 billion (i.e. an average of $640,000 per successful application). The following statistical summaries relating to the first four calls are provided at Appendix A:

(a)   summary of applications received;

(b)   summary of applications approved;

(c)   breakdown of approved projects by category;

(d)   successful applications by project category;

(e)   successful applications by beneficiary; and

(f)   breakdown of approved projects by beneficiary.

Audit review

1.14   Audit has recently conducted a review to examine the manner in which the QEF is administered. The review has identified five areas in which audit recommendations have been made to the EMB to improve the administration of the QEF. These are:

Grants Programme

(a)   strategic planning (PART 2);

(b)   assessment processes and monitoring of funded projects (PART 3);

(c)   performance measures (PART 4);

(d)   dissemination practices (PART 5); and

Awards Programme

(e)   outstanding schools and teachers awards (PART 6).

General response from the Administration

1.15   The **Secretary for Education and Manpower** welcomes the Audit Report. She has said that many of the observations are valid and the audit recommendations are constructive. She is grateful for the painstaking effort that the Audit Commission has taken in examining the relevant documents, drawing reference from experiences overseas as well as suggesting a useful analytical framework and pertinent issues that the QEF Steering Committee and the EMB should take into account in considering the way forward for the QEF.

1.16   She has also said that the Steering Committee regularly reviews the QEF's administration and its thinking has evolved over time, indicating that members are always consciously reflecting on their experience and seeking improvements so that the QEF can yield the maximum benefit for the school sector. Looking ahead, she sees a need to put more emphasis on scrutinising the project deliverables and evaluating the effectiveness of projects. To further enhance the quality of education, she would like to encourage more innovative projects of high quality. In the past, the EMB put considerable efforts in publicising the QEF and disseminating the results of projects through the annual QEF Expositions, roving exhibitions, experience-sharing sessions and Saturday talks. More needs to be done in terms of developing an effective promotion and dissemination strategy that would maximise the impact and sustainability of the many good practices among the over 4,300 projects approved so far.

1.17   At its meetings in August and September 2001, the Steering Committee agreed that developing a dissemination strategy, distilling the good practices from completed projects and having the good practices effectively disseminated should be the focus of its work for 2001-02. Hence, for the next call for applications, the Steering Committee has decided to adopt a more focussed approach in terms of the themes of project proposals, applicants' eligibility and the number of applications that an applicant can submit. The Steering Committee is hopeful that this will enable more time and efforts for project monitoring and promotion, which are equally important functions of the QEF.

1.18   The **Secretary for the Treasury** has said that she supports Audit's recommendations to streamline the approval mechanism, to develop a strategic plan for the use of the QEF, to improve coordination as well as avoid duplication of funding for education initiatives, and to improve monitoring of QEF programmes.

PART 2: STRATEGIC PLANNING OF THE QEF

2.1   This PART examines the planning process of the QEF and recommends improvement in the strategic planning process.

An overarching strategic plan

2.2   An important objective of establishing the QEF is to *"fund worthwhile initiatives on a pilot basis and one-off projects that aim to raise the quality of school education, and to promote quality school education at all levels"* (Note 1).   Therefore, like other similar institutions or foundations (Note 2), the QEF is expected to create value.

2.3   The Grants Programme has five broad categories in which schools may submit applications for funding (see para. 1.7 above). In addition, two special categories have been added to the Grants Programme, namely grants to public sector schools for air-conditioning of classrooms and libraries and for procurement of notebook computers for loan to needy secondary students (see para. 1.8 above).

Audit observations on strategic planning

2.4   The addition of two special categories of grants (i.e. air-conditioning of classrooms and procurement of notebook computers) mentioned in paragraph 2.3 above has resulted in significant changes to the allocation of funding.   However, recent educational researches (Note 3) place greater emphasis on the quality of teaching, rather than the provision of additional resources.   For this reason, there is a need for the QEF to formulate an overarching strategic plan. The plan needs to focus on the means by which the quality of teaching can be enhanced, as opposed to "standardising" (see para. 2.11 below) the Grants Programme in order to allocate funding to a broad number of schools that may have a resource deficiency in one area or another.

2.5   A strategic plan for the QEF should include:

Note 1:   *Paragraph 2 of Finance Committee paper on Grant to a Quality Education Fund dated 12 December 1997 (FCR(97-98)81).*

Note 2:   *It has been found that some foundations could do better strategically. In Porter and Kramer's article "Philanthropy's New Agenda — Creating Value" (Harvard Business Review November/December 1999), it is stated that "Satisfied with their agenda of doing good, too few foundations work strategically to do better. The time has come to embrace a new agenda, one with a commitment to creating value".*

Note 3:   *(a) US Department of Education: Meeting the Information Needs of Education Policymakers (1998); and*

   (b) Melsom, Education in the 21st century: An Outcome Focus (Curriculum Directions 1998).

- a mission statement;

- long-term goals (3 to 5 years);

- short-term objectives and priorities to be implemented to achieve the goals;

- ways to improve continuously the quality, efficiency and value for money of the fund; and

- a planned approach to monitoring and evaluation of outcomes to enable the measurement of performance against pre-determined benchmarks as well as making adjustments to the plan.

2.6   A strategic plan is not a static document. It is an evolving entity that is the constant point of reference in planning and decision-making. The main benefit of the strategic plan for the QEF is that specific outcomes are targeted. Performance measurement against the strategic plan will show the future direction of programme funding.

2.7   A recent research conducted in the United States has indicated four approaches through which grant-giving foundations can add value. The research states that: *"In practice, the four approaches to creating value — selecting grantees, signalling others, improving performance and creating and disseminating new ideas — are mutually reinforcing and their benefits are cumulative"* (Note 4). That is, each approach adds value to the other, as well as providing an overall benefit to the manner in which a grants programme may operate.

2.8   The QEF may adopt these four approaches as part of its strategic planning, as follows:

(a)   ***Selecting the best grantees.*** This refers to identifying grantees with best project results for wider dissemination. For this to be done, it is necessary for an analysis of QEF funded research data and of project outcomes to be undertaken;

(b)   ***Signalling other institutions.*** Given the extent of learning that has been generated through research, funded projects and the awards programme, the QEF is in a strong position to inform other government agencies (such as the ED) and the management bodies of aided schools about effective schooling and strategies to improve student learning;

Note 4:   *Porter and Kramer (1999) op. cit. In the same article the authors have also said that grant-giving foundations are intermediaries between the donors who fund them and the social enterprises that they, in turn, support. But, if grant-giving foundations "serve only as passive middlemen, as mere conduits for giving, then they fall far short of their potential and of society's high expectations".*

(c) *Improving the performance of grant recipients.* The QEF can create more value if it moves from being a fund-provider to the role of a partner providing advice, management assistance, access to professional services and other non-cash resources (see paras. 2.39 and 2.42 below); and

(d) *Advancing the state of knowledge and practice.* Most likely, the QEF can create its greatest value by continuing to fund research that links theory with practice, by monitoring the impact of funded projects, and by disseminating effective practice drawn from these projects to the broader educational community.

Audit recommendations on strategic planning

2.9 **Audit has *recommended* that the Secretary for Education and Manpower, in collaboration with the ED, should:**

(a) **develop a strategic plan for the QEF, having regard to the need to optimise the funding for standard projects, for fostering innovation and for satisfying other needs of the schools (see para. 2.22(c) below);**

(b) **adjust periodically the strategic plan based on the outcomes and evaluation of funded research projects;**

(c) **aim to use the QEF grants to create optimum value in the education system by incorporating into the strategic plan the following features:**

   (i) *Selecting the best grantees.* **This can be achieved through formal evaluation of the outcomes of the funded projects for wider dissemination;**

   (ii) *Signalling other institutions.* **The QEF can demonstrate to other agencies such as the ED and the management bodies of aided schools about the learning acquired by the QEF;**

   (iii) *Improving the performance of grant recipients.* **This can be achieved by the QEF adopting the role of a partner providing the necessary input; and**

   (iv) *Advancing the state of knowledge and practice.* **To achieve this, the QEF should target projects that link theory with practice, particularly those projects that forge collaborative relationship between schools and tertiary institutions.**

Response from the Administration

2.10   The **Secretary for Education and Manpower** has said that she finds the audit recommendations eminently sensible. She will invite the QEF Steering Committee to take the audit recommendations into account in deliberating on the strategic way forward of the QEF.

Impact of standard projects on strategic planning

2.11   Some application packages have been standardised by the QEF Secretariat, partly because of the popularity and success of the projects and partly because of a desire to streamline the selection processes. Four types of standard projects have been introduced. These can be classified under the major categories of the Grants Programme (see para. 1.7 above). The numbers of approved projects in the first four calls are shown in brackets:

> *Effective learning.* Reading Schemes (150 projects);

> *All-round education.*   School orchestras, which include Chinese or western orchestras and percussion training for pre-primary institutions (155 projects);

> *School-based Management.* Parent Resource Centres (183 projects);

> *Information Technology.* Multi-media Learning Centres (313 projects).

In making these grants, the original concept of directing funding to one or two schools has been replicated by an increasing number of applications by schools in successive funding rounds.

2.12   In addition, two special standard project grants for air-conditioning of classrooms and for procurement of notebook computers for loan to needy students (see para. 1.8 above) have been introduced since December 2000. Altogether, these six types of standard projects have an impact on strategic planning which is discussed in paragraphs 2.13 to 2.16 below.

Audit observations on impact
of standard projects on strategic planning

2.13   Table 1 below shows the number of standard projects approved in the first four calls of the QEF. It can be seen that standard projects increased from 65 in the first call to 345 in the third call. The increasing trend has continued into the fourth call (in which the number of standard projects increased to 577, representing 36% of the total number of approved projects) mainly because of an increase of Parent Resource Centres projects and the introduction of grants for air-conditioning of classrooms.

Table 1

Standard projects approved in the first four calls

(in numbers)

Type of standard project	First call	Second call	Third call	Fourth call	Total
1. Reading Schemes	28	27	60	35	150
2. Orchestras	30	11	54	60	155
3. Parent Resource Centres	1	3	73	106	183
4. Multi-media Learning Centres	6	21	152	134	313
5. Air-conditioning	0	0	6	241	247
6. Notebook computers (Note)	0	0	0	1	1
(a) Total no. of standard projects	65	62	345	**577**	1,049
(b) Other projects	458	555	1,259	1,020	3,292
(c) Total no. of approved projects [(a)+(b)]	523	617	1,604	1,597	4,341
% of standard projects [(a)/(c)ˣ100%]	12%	10%	22%	**36%**	24%

Source: QEF's records

Note: Provision of notebook computers to 503 secondary schools

2.14   Table 2 below shows the increase of standard projects in terms of QEF funding. Standard projects took up 40% of the funding in the fourth call.

Table 2

Funding provided to standard projects approved in the first four calls

Type of standard project	First call ($ million)	Second call ($ million)	Third call ($ million)	Fourth call ($ million)	Total ($ million)
1. Reading Schemes	1.8	2.4	2.3	1.3	7.8
2. Orchestras	8.3	3.1	17.2	16.3	44.9
3. Parent Resource Centres	0.1	0.1	3.4	5.4	9.0
4. Multi-media Learning Centres	3.9	18.9	192.7	182.2	397.7
5. Air-conditioning	0	0	4.5	63.0	67.5
6. Notebook computers	0	0	0	199.4	199.4
(a) Total amount of standard projects	14.1	24.5	220.1	**467.6**	726.3
(b) Other projects	357.2	189.4	787.2	701.4	2,035.2
(c) Total amount of approved projects [(a)+(b)]	371.3	213.9	1,007.3	1,169.0	2,761.5
% of standard projects [(a)/(c)´100%]	4%	11%	22%	**40%**	26%

Source: QEF's records

2.15   Standard projects will continue to increase because schools can easily justify their applications by quoting similar successful precedent cases (e.g. for air-conditioning standard projects, schools are not required to justify their applications). Standard projects have increased substantially in the first four calls. In terms of funding, the increase is as much as 32 times, from $14.1 million in the first call to $467.6 million in the fourth call. In the fourth call, standard projects absorbed 40% of the funding. If funding for standard projects continues to increase, it is conceivable that they could take up a very large share of the QEF funding.

2.16   However, having regard to recommendations of the EC (see para. 1.3 above), and the original objectives of the QEF (see para. 2.2 above), it is undesirable for standard projects to take up a large share of the QEF funding. There is a clear need to retain a worthwhile proportion of funding allocation that fosters innovation. In this respect, the development of a strategic plan would be useful.

QEF as a supplementary fund-provider to ED

2.17   *Information Technology Coordinators projects.* In the 1998 Policy Address, the Chief Executive announced the provision of 250 Information Technology Coordinators (ITCs) to help public sector schools which were ready to develop and implement their IT-based initiatives. To implement these initiatives, a total provision of about $108 million was provided under the recurrent funding formula to 250 schools through the ED's annual budgets in the 1999-2000 to 2001-02 Estimates. The 250 ITCs posts provided to the 250 schools are for a period of two years and are subject to review.

2.18   To extend the ITCs scheme to another 163 schools, in late 1999 the ED applied for a grant of $76.2 million in the third call of the QEF. The funding was to provide ITCs for a period of two years commencing from the 2001-02 school year. The application (No.1999/3224) was approved by the QEF as an ED project. In the fourth call of the QEF, in late 2000 the ED applied for another grant of $161.8 million to extend the ITCs scheme to another 751 schools for providing ITCs for one year in the 2001-02 school year. The application (No. 2000/1474) was also approved by the QEF as an ED project.

2.19   Initially, the funding for the ITCs scheme for schools was made under the Government's annual budget process. To extend the scheme to other schools, the ED successfully applied twice from the QEF for total funding of $238 million ($76.2 million and $161.8 million), instead of from the Government's annual budget. In effect, the QEF has been used as a supplementary funding source for school education.

2.20   *Multi-media Learning Centres (one-student-one-computer) projects.* Funding for implementing IT in education was provided in the 1999-2000 Estimates under the ED's capital expenditure accounts, as follows:

(a) $252.6 million (under Subhead 510) for the provision of multi-media computers to government and aided primary schools; and

(b) $2,583 million (under Subhead 511) for the enhancement of use of IT in school education.

The key initiatives of the two capital expenditure accounts include the provision of Multi-media Learning Centres for primary, secondary and special schools. For upgrading the Multi-media Learning Centres scheme from the "two-student-one-computer" to "one-student-one-computer" basis, the relevant expenditure is charged to the two ED capital expenditure accounts. However, to

extend the "one-student-one-computer" basis to 102 subsidised secondary schools, the ED applied to the QEF for a funding of $31.7 million in the third call ended in November 1999. The application (No. 1999/1144) was approved by the QEF as an ED project. This case shows that the QEF has again been used as a supplementary funding source for school education.

2.21   Without the provision of an overarching strategic plan and with the same trend of funding, due to the increase in the number of standard projects over the years, it is probable that the Grants Programme will be subsumed by the standard projects. The QEF would then become an ED's supplementary funding source for school education. This would defeat the original objective of the QEF (see para. 2.2 above) of funding "worthwhile initiatives on a pilot basis and one-off projects that aim to raise the quality of school education". This would also be inconsistent with the recommendation of the EC that the QEF should fund "school-based innovative projects and experiments aimed to improve the quality of education at all levels" (see para. 1.3(a) above). This is because the EC has considered that examples of innovative projects are those which "promote the application of information technology in teaching and learning, new teaching methods and development of school-based curriculum to enhance students' knowledge or skills, programmes to increase students' civic awareness or to develop their potential, or experiential training to raise the self-esteem of low academic achievers".

Audit recommendations on impact
of standard projects on strategic planning

2.22   **Audit has *recommended* that the Secretary for Education and Manpower should:**

   (a)   **undertake a review of the current "standard projects" to establish the costs, benefits and outcomes of these projects, so as to identify future standard projects that should receive QEF funding;**

   (b)   **allocate funds only to standard projects where there is a direct and discernible link between the use of QEF funds and quality outputs in schools; and**

   (c)   **in developing the strategic plan for the QEF (see para. 2.9(a) above), consider the optimum proportion of funds for allocating to standard projects, for fostering innovation and for providing supplementary facilities in schools.**

Response from the Administration

2.23   The **Secretary for Education and Manpower** has said that:

   (a)   she accepts the audit recommendations;

(b)   the ECR7 gave birth to the idea of a QEF. It is clear from the ECR7 and the Finance Committee paper FCR(97-98)81 that the QEF aims to encourage quality educational initiatives from schools. Grants from the QEF are, therefore, by necessity, supplementary to government's provision to schools assessed on common and standard terms;

(c)   the QEF has become popular especially with the school sector. It has a positive catalytic effect on the quality of education in the recipient schools, providing impetus for them to come up with many initiatives having regard to their unique conditions. "Standard" projects such as Reading Schemes and Multi-media Learning Centres have benefited a large segment of the education community. Nevertheless, after more than three years in operation and with over 11,000 applications processed, it is appropriate for the EMB to reflect on the experience in administering the QEF. The review conducted by the Audit Commission is thus a timely and welcome exercise;

(d)   members of the Steering Committee are very dedicated and fully supportive of the QEF. The Steering Committee conducts reviews after each assessment cycle with a view to setting the direction of the QEF in the following year. For instance, 12 and 4 themes were respectively suggested for the third and the fourth calls, taking into account the current priorities of education reform. To reduce the burden on schools in preparing proposals, the Steering Committee therefore agreed to "standardise" the applications for certain items for which the needs of most schools were quite similar. Application packages have therefore been standardised for projects such as air-conditioning, Multi-media Learning Centres and orchestras, etc. The term "standard projects" hence represents an efficiency drive to simplify the application procedures rather than a change in the strategic direction of the QEF; and

(e)   the QEF is, by its nature, a source of "seed money" that enables schools to embark on projects which help raise the quality of school education, but which would otherwise not be possible for lack of funding. Noting the growing prevalence of IT in education in other countries and the importance for our schools to catch up so as to maintain Hong Kong's competitiveness, the QEF considered it crucial and time-critical to extend the pilot IT projects initiated by the Government (which benefited only a small number of schools) to more schools and students. QEF funding has enabled the number of schools with ITCs to increase from 270 to 1,164; and the upgrading of the provision of schools which applied for Multi-media Learning Centres from "two-student-one-computer" to "one-student-one-computer". The provision of ITCs has enabled schools to adopt more innovative approaches to teaching and learning. This is consistent with the objectives of the QEF.

School-based Management projects

2.24   School-based Management projects in the context of the QEF embrace projects for home-school cooperation, staff development, school improvement works for enhancing teaching and learning effectiveness and school-based management models (e.g. corporate governance of schools). School-based Management is one of the major categories of grants (see para. 1.7 above). A total funding of $279 million was approved in the first four calls of the QEF.

Audit observations on School-based Management projects

2.25   Audit notes that some of the "proven initiatives" of School-based Management projects have recurrent resources implications (e.g. operating a Parent Resource Centre). However, the QEF only provides funding on a one-off basis. The long-term availability of such recurrent funding is out of the scope of the QEF. Audit considers that, by integrating the planning of the proven initiatives into the existing school budgetary process, both initial and long-term factors can be considered before allocating QEF grants to such initiatives. Furthermore, this will enable the QEF to focus its funding and grants on projects/programmes with high learning impact (e.g. professional development projects — see paras. 5.13 to 5.19 below).

Audit recommendations on School-based Management projects

2.26   **Audit has *recommended* that the Secretary for Education and Manpower should:**

   (a)   **for proven standard projects, such as Parent Resource Centre, review their long-term needs to ascertain if their on-going operations will have recurrent expenditure implications; and**

   (b)   **consider funding those proven projects through the existing school budget process instead of through the QEF.**

Response from the Administration

2.27   The **Secretary for Education and Manpower** has said that she accepts the audit recommendations.

Impact of major QEF grants on strategic planning

2.28   The ED and other tertiary institutions have been successful in obtaining research grants from the QEF. The ED has received funding for a series of large-scale projects. Examples of these projects amounting to $300 million are shown in Appendix B.

**Audit observations on impact
of major QEF grants on strategic planning**

2.29   To the ED, the QEF is a source of supplementary funding for its programmes. The QEF requires a less competitive, more flexible resource bidding environment outside the annual budget process. Should these draws continue, the practice would have the potential of limiting QEF funds available for innovative applications from schools.

2.30   Furthermore, Audit notes that some of the projects proposed by tertiary institutions have a long time-frame, and are complex and sometimes theoretical research projects. (Examples of some major projects are shown in Appendix C.)   The average costs of research projects of $2.7 million for the third call and $1.5 million for the fourth call are considerably higher than the average cost of $680,000 per successful application for these two calls (see Note 3 in page 3/5 of Appendix A).

2.31   Audit has noted the academic merits of such research projects. Whether a research project can generate useful outcomes will only be known in the advanced stage of the research. Because of the significant amounts involved in these research projects and the uncertain outcomes, it is undesirable for the QEF to fund too many research projects at the same time. Moreover, for complex research projects that extend over a long time-frame, it is desirable to give funding support by phases. This is to ensure that the promised project deliverables are delivered, and are really useful having regard to the objectives of the QEF. Funding by phases will also lead to improved educational outcomes, before further resources are committed.

**Audit recommendations on impact
of major QEF grants on strategic planning**

2.32   **Audit has *recommended* that the Secretary for Education and Manpower should:**

(a)   **critically examine major research project proposals to ensure that their aims align with the objectives of the QEF, and are not primarily intended for academic and theoretical research;**

(b)   **closely monitor the outcomes of the tertiary institutions research projects and the large-scale ED projects, so as to ensure that they are practical and useful having regard to the objectives of the QEF;**

(c)   **in view of the substantial amounts granted for major research projects, ensure that funding for research projects with uncertain outcomes is kept to a low level; and**

(d)   **for complex research projects with a long time-frame, consider giving funding support by phases so as to ensure that the promised project deliverables have been delivered before further resources are committed.**

Response from the Administration

2.33   The **Secretary for Education and Manpower** has said that:

(a)   she accepts the audit recommendations;

(b) the Finance Committee paper FCR(97-98)81 envisages the EMB and the ED to be possible applicants for QEF funds. In respect of most projects for which the ED was the applicant, it played more the role of a coordinator-cum-facilitator and usually at the request of the schools too. Batch application saves processing time on the part of the schools, the Assessment Subcommittee and the Secretariat. The real beneficiaries of such projects were the schools, not the ED. As an applicant, the ED has not been given any favourable treatment by virtue of its government department status. All applications are assessed by the same set of criteria and handled even-handedly; and

(c) tertiary institutions were not barred from applying for QEF funding provided that two conditions were met. Firstly, the proposed research must have an application value and is not a pure academic pursuit. Secondly, the target beneficiaries are local schools/students. The costs of such projects are comparatively high given their complexity, scale and the requirement for an adequately large sample size to ensure the validity and general applicability of the research outcomes. Examples of the funded projects with an application value include:

(i) Enhancement of Learning Motivation in the Schools;

(ii) Designing Assessment Instruments for Children with Specific Learning Difficulties; and

(iii) Development of Performance Indicators for Measuring Students' Performance in Affective and Social Domains.

The direct beneficiaries are schools which collaborated with the tertiary institutions. When properly analysed and disseminated, the results of such researches may also benefit other schools.

**Impact of additional and
alternative funding on strategic planning**

2.34 Reform initiatives as well as expansion of the education system in Hong Kong over the past few years have led to the creation of a number of special funds, grants and programmes to enable individual schools to meet the demands for enhanced or expanded programmes. Other funding sources are available in the form of:

(a) incentive grants for the purchase of IT infrastructure and recurrent grants to provide Internet services;

(b) supplementary grants to assist in the implementation of School-based Management;

(c)   language learning support (including incentive grants and research grants);

(d)   grants to promote home-school cooperation and support uniformed youth groups; and

(e)   one-off grants to pre-primary institutions for library purchases.

A summary of various funding sources is at Appendix D.

Audit observations on impact of additional and alternative funding on strategic planning

2.35   With such a wide range of alternative funding sources for educational programmes and projects, there appears to be very little synergy and coordination between these funding sources. Some funding sources overlap in terms of their objectives and the type of projects that can be funded. For example, schools can apply for setting up a computer-aided learning centre from a number of funding sources. Such a variety of funding sources could be confusing to applicants and costly to administer.

Audit recommendation on impact of additional and alternative funding on strategic planning

2.36   **Audit has *recommended* that the Secretary for Education and Manpower should conduct a thorough review of various funding sources that are available for educational purposes in Hong Kong with a view to improving coordination and avoiding duplication of funding.**

Response from the Administration

2.37   The **Secretary for Education and Manpower** has said that:

(a)   she will apply due diligence to improve coordination and avoid duplication of funding between various education-related sources of funding; and

(b)   the funding sources listed in paragraph 2.34 above have arisen over a period of time and were approved by the Finance Committee for earmarked purposes. Most of them are non-works capital items with prescribed parameters. In contrast, the ambit of the QEF is more embracing and, in order to encourage initiatives from schools, the allocation criteria are deliberately broad, thereby rendering the QEF a possible source of funding for initiatives in many facets, some of which may be relevant to aspects of education for which specific funds have been created. At the risk of over-generalisation, one unique feature of the QEF not commonly shared by other funds is that the QEF focuses on funding school-based, and thus school-specific initiatives, rather than initiatives that have been centrally designated and designed and thus generally applicable in a uniform manner to most schools.

Administration of the QEF

2.38   At present, the QEF is administered by the QEF Secretariat within the EMB.   The workload of the QEF Secretariat has become increasingly heavy because of the large number of applications received and the need to monitor the progress of the successful applications (11,259 applications and 4,341 grants for $2.8 billion in the first four calls).   The QEF Secretariat has mainly played the role of a fund provider.

Audit observations on administration of the QEF

2.39   As pointed out in paragraphs 2.7 and 2.8 above, in its best form the QEF is expected to add more value.   In doing so, the QEF needs to take up the role of providing advice, management assistance and professional services so as to improve the performance of grant recipients (see para. 2.8(c) above).   The EMB, being a policy bureau, does not have the manpower to support the QEF Secretariat to provide such services to the grant recipients.   Audit notes that the ED, being an executive department for school education, is better placed to provide such services.

2.40   In monitoring educational projects, the ED has relatively more experience.   The ED is in a better position to undertake for the QEF a risk management assessment to identify areas where the greatest project risks lie so as to determine a basis for a more cost-effective methodology for project monitoring (see para. 3.24(a) below).   The ED also has an existing school inspection system (including the existing school audit visits) which can be used to review the opportunities available for project monitoring (see para. 3.24(b) below).

2.41   Through its existing system of identifying good practices in schools during inspections, the ED can play an important role in disseminating innovative "one-off" projects of the QEF to schools and other education practitioners.   The ED can also use its system network for acquiring professional development from providers, and for a broader dissemination of effective programmes (see paras. 5.12 to 5.19 below).

Audit recommendation on administration of the QEF

2.42   **Audit has *recommended* that the Secretary for Education and Manpower should consider transferring the administration of the QEF from the EMB to the ED so that, by using the ED's professional expertise and system network, the outcomes of the projects funded by the QEF can be enhanced.**

Response from the Administration

2.43   The **Secretary for Education and Manpower** has said that she shares the audit observation that organisationally, the ED is better placed than the EMB to administer the QEF. In fact, the EMB and the ED have reached an agreement to transfer the Secretariat of the QEF to the ED by 1 April 2002.

**PART 3: ASSESSMENT PROCESSES AND
MONITORING OF FUNDED PROJECTS**

3.1   This PART examines the assessment processes and monitoring of QEF funded projects and notes that the processes can be streamlined.

Guidelines for decision making

3.2   The QEF is administered by the QEF Secretariat within the EMB. The QEF Secretariat is conscious that its methods and processes were relatively ad hoc in the early days of the fund, and has been consciously looking for improvements to the systems over each call on the QEF. The Secretariat and the Steering Committee have regularly considered and modified their processes and methods and gradually introduced more detailed and structured processes. Ad hoc "guidelines" have therefore evolved including the definition of "innovative", the determination of what is an acceptable staff cost as a percentage of a project budget, and a determination that items already covered by the ED budget will not be funded by the QEF.

Audit observations and recommendations
on guidelines for decision making

3.3   As most of the QEF Secretariat staff and members of the Steering Committee have been involved with the QEF for some time, corporate memory exists. However, inconsistencies and changes may arise over time. Clear and actionable documentation can minimise the risks of inconsistent decisions.

3.4   **Audit has *recommended* that the Secretary for Education and Manpower should:**

(a)   **develop systematic documentation (such as procedural manuals and selection guidelines) so as to enable the QEF Secretariat to achieve greater consistency in decision making; and**

(b)   **incorporate the following features into the procedural guidelines:**

(i)   **details of the types of projects that may be funded under specific categories;**

(ii)   **appropriate criteria that facilitate objective assessments of the relative merits of individual applications; and**

(iii)   **examples of applications that have met the selection criteria.**

Response from the Administration

3.5   The **Secretary for Education and Manpower** has said that she agrees that the QEF Steering Committee and the EMB should take into account the audit recommendations, which are good suggestions, when considering the focus of the QEF's work in the coming few years. She has also said that procedural guidelines and selection criteria have been incorporated into the application forms and can be accessed on the QEF web-sites. Nevertheless, she will undertake a review to identify further areas for refinements and improvements.

Assessment and processing of applications

3.6   The QEF Secretariat works closely with a network of volunteers who devote considerable time and effort to assessing and selecting projects, and monitoring their progress. The Secretariat has developed a range of processes and techniques to manage the considerable workload and staff have been conscientious in implementing them.

Audit observations on
assessment and processing of applications

3.7   Audit appreciates that the QEF Secretariat applies a high level of rigour in its approach to processing applications. However, this has the downside of introducing process inefficiencies. After reviewing the QEF processes and a detailed examination of 45 case files (based on stratified sampling) relating to successful applications which had received QEF funding, Audit has identified the following issues:

(a)   *Detailed level of information.*   Owing to the comprehensive and detailed information requirements of the QEF applications, the application process presents a time-consuming burden for applicants. For example, project proposals require a detailed budget down to minor items. Grantees also commented on the difficulties in providing the Secretariat with accurate breakdowns at such an early stage of the project;

(b)   *Significant effort in budget trimming.*   A significant amount of assessment effort is spent on negotiating with applicants application budgets based on the specialised knowledge of assessors of the cost of individual items within the proposed budgets. The QEF has information which enables applicants to price many elements of a project. Applicants have access to this information but they sometimes ignore it;

(c)   *Multiple handling of application documentation.*   Each application normally needs to go through the QEF Secretariat, the Assessment Panels and the Steering Committee before a final decision is made. There is evidence of multiple handling of documentation as applications are passed backwards and forwards during the assessment process; and

(d)   *Labour- and paper-intensive process.*   The existing process is both labour- and paper-intensive, with considerable effort spent on capturing application and assessment process information. The QEF Secretariat is responsible for maintaining the application

database throughout the process, updating information supplied by the applicant and assessors.

3.8 In view of the large number of applications (over 11,000 applications in the first four calls) that have to be processed by the QEF Secretariat, it is necessary for the QEF to streamline the assessment processes. This will have the benefits of alleviating the heavy workload of the QEF Secretariat and shortening the processing time for applications. The following areas are worthy of consideration:

(a) *Use of pricing standards and application guidelines.* Consolidating the pricing standards established by the QEF and promoting them within the guidelines provided to applicants will reduce the effort required in budget negotiations and debating the merits of projects that do not meet guidelines. For example, the QEF has now a history of funding school orchestras. Information related to the cost of establishing and running an orchestra may be collated and distributed as part for the guidelines to give potential applicants insights into the standard cost for school orchestras; and

(b) *Use of an electronic application and assessment process.* Lodging applications electronically and enabling assessors to view and assess applications electronically should help reduce significantly the Secretariat's workload in re-capturing, scanning and compiling reports.

Audit recommendations on assessment and processing of applications

3.9 **Audit has *recommended* that the Secretary for Education and Manpower should:**

(a) **streamline the assessment processes, with a view to reducing the workload of the QEF Secretariat and shortening the time for processing applications; and**

(b) **consider adopting the following approaches in streamlining the processing of applications:**

(i) **making available to applicants pricing standards and application guidelines; and**

(ii) **exploring the development of an electronic application and assessment process.**

Response from the Administration

3.10 The **Secretary for Education and Manpower** has said that she accepts the audit recommendations.

Monitoring of QEF funded projects

3.11   The QEF monitoring process includes an assessment of the applicant's potential to meet the QEF's objectives and those of the project itself. In assessing each application for funding, the QEF considers the merits of the application against a range of publicly known vetting criteria. These criteria are summarised below.

    (a)   ***Quality of project proposal.*** The project must be conceptually sound and have clear objectives and innovative ideas. In addition, the project should be comprehensive in its design, feasible, able to bring about change of culture in the school and supported by people with the appropriate qualifications and experience;

    (b)   ***Teacher professional development.*** The proposal must make clear teachers' professional involvement and should explain the ways in which teachers' professional development can be enhanced;

    (c)   ***Cost-effectiveness.*** Cost-effectiveness is to be demonstrated by the end products developed, the number of beneficiaries and the scope of activities proposed. The proposal should also make clear whether the activities can be continued beyond the project itself; and

    (d)   ***Other factors.*** The proposal should explain other matters such as the project's potential for wider dissemination, participation by the private sector, and the applicant's track record in managing similar projects.

These criteria are also used to evaluate the performance of the projects (discussed in PART 4).

3.12   Receipt of a QEF grant is conditional on the grantee agreeing to provide the QEF with regular reports throughout the duration of the project, as well as a final report when the project is completed. Before 1 April 2001, grantees were required to submit financial and progress reports every quarter, and financial and progress reports at end of project. As from 1 April 2001, the reporting requirements for projects are:

    (a)   half-yearly financial reports (for projects of and below $100,000) or four-monthly financial report (for projects over $100,000);

    (b)   half-yearly progress reports (for projects of and below $100,000) or four-monthly progress report (for projects over $100,000);

    (c)   end of project financial report; and

    (d)   final project report.

3.13　　　The agreement signed by the grantee with the Trustee of the QEF requires regular reporting on the overall progress of the project and the expenditure of the grant money. Regular reporting provides a structure and discipline framework which is valuable for many grantees. Grantees may also anticipate site visits from the Secretariat. Since 2000, external reviewers, who are front-line teachers, are engaged to provide peer group monitoring of the projects. Grantees are also required to maintain a fixed asset register for all items of equipment purchased as part of the project and carrying a cost greater than $1,000.

3.14　　　External reviewers have been appointed since 2000 with the intention of enhancing the transparency of monitoring, encouraging participation of front-line workers in peer coaching as well as assisting professional development through the establishment of a district network of professional teachers. Complex projects, projects with a long time-frame or projects requiring a significant budget may receive additional monitoring in the form of expert review. Expert reviewers are well qualified experts in their own field.

3.15　　　The QEF Secretariat uses the project reports for financial and output monitoring, as illustrated in Table 3 below.

Table 3

Monitoring of QEF projects

Aspect	By QEF Secretariat	By schools
Financial	QEF Secretariat requires evidence that funds have been expended in accordance with the agreements.	Schools are required to open separate bank accounts, maintain records of all transactions and provide progress reports and a final report to acquit project expenditure.
Output	QEF Secretariat requires information that demonstrates that funds have made a difference in schools, and have added value that would not have existed without the support of the QEF.	Schools are required to document project processes and outputs to enable dissemination to a broader audience, including the QEF. (The QEF decides whether particular projects will be targeted for dissemination to a broader audience.)

Source: Audit's analysis of selected projects

Members of the Promotion and Monitoring Subcommittee and QEF Secretariat staff also visit schools and conduct interviews with participants to evaluate the progress and effectiveness of projects. The outcome of such visits is documented.

Audit observations on project monitoring

3.16   Monitoring places considerable work on everyone involved in the QEF. In the course of this study, Audit consulted with 15 QEF grant recipients. Many grantees with whom Audit spoke commented upon the work required to maintain frequent reporting on both the project progress and the budget expenditure. Secretariat staff were also mindful of this from their own workload and their interaction with grantees. Given the increasing workload of the Secretariat, the QEF Steering Committee at its meeting in August 2000 discussed streamlining of processes to better manage the work. This could include:

(a)   sampling projects for monitoring;

(b)   requiring minimal documentation on small projects (measured in terms of the size of the grant, or the length of the project); or

(c)   conducting random auditing of projects and/or project documentation.

3.17   Audit notes that the reviews carried out by the QEF Secretariat tended to focus on the inputs (e.g. "x" pieces of furniture and equipment have been installed in a Parent Resource Centre), and process outputs (e.g. "y" students have participated in a new music programme). But the reviews stopped short of analysis in relation to learning outcomes (i.e. identification of sustained improvements in learning that can be demonstrated as a result of the QEF project).

3.18   The workload involved in monitoring projects has continued to increase each year. While the Secretariat had attempted to maintain the close contact with projects, which was possible during the first year of the QEF, it is not always possible for the Secretariat to provide expertise across the broad range of projects now underway.

3.19   The potential for change in the area of project monitoring is both a necessity and an opportunity. With an increased number of projects, the QEF Secretariat is facing increased pressure to manage the current regime of administrative processes. As illustrated in Table 4 below, the numbers of applications and grantees have grown.

Table 4

QEF applications and grantees

Call	Closing date	Number of Applications	Number of Grantees
First	30 April 1998	2,368	523
Second	30 November 1998	2,160	617
Third	30 November 1999	3,224	1,604
Fourth	30 December 2000	3,507	1,597

Source: QEF's records

3.20   Second and third call documentation submitted to the QEF Secretariat for monitoring progress was still being processed as fourth call applications were received. In order to cope with the workload, either the QEF Secretariat's resources have to be increased (thereby increasing the administrative costs) or the administrative burden of the QEF projects has to be reduced.

3.21   When the resourcing of public organisations such as schools is channelled through funding bodies such as the QEF, two additional layers of costs are added. The first is the funding agency's own administrative costs; the second is the administrative costs borne by grantees complying with the application and reporting procedures.

3.22   In Hong Kong, schools in the public sector are generally required to comply with the accountability requirements and procedures of the ED (Note 5). There is an opportunity that existing school audit processes can be expanded to conduct an annual audit of QEF project expenditure. For projects which have a committee of management, the requirement to vet virement requests by the QEF Secretariat could be delegated to this committee, provided that the audit process mentioned above also scrutinises the records and financial transactions of the project. Such adjustments to administration processes could be welcomed by schools and carry minimal risk to the QEF. At the same time, they would enable the QEF Secretariat to have more time to focus on strategic evaluative processes, and monitor the impact of funding as opposed to compliance with administrative procedures.

Note 5:   *These accountability requirements include guidelines for internal control and an annual audit of a school's financial operations by a certified public accountant.*

3.23   Having regard to the audit findings mentioned in paragraphs 3.16 to 3.22 above, possibly a better structure for monitoring and reporting of projects is shown below.

Better structure of monitoring and reporting of QEF projects

Projects inputs	**Process outputs**	**Project outcomes**
Grantees submit reports accounting for project expenditure on an annual basis to demonstrate that funding expenditure aligns with the budget considered by the QEF.	Grantees submit reports mid-stage and end of project on process outputs (including where adjustments to processes have been made to accommodate unforeseen contingencies).	• Grantees provide end of project reporting on the outcomes achieved through the application of QEF funding. • Grantees and QEF Secretariat participate in longitudinal study on the effectiveness of the QEF projects. This study is to be commissioned by the QEF as part of its strategic planning.

Audit recommendations on project monitoring

3.24   **Audit has *recommended* that the Secretary for Education and Manpower, in collaboration with the ED (see paras. 2.40 and 2.42 above), should:**

(a)   **undertake a risk assessment in order to identify those areas where the greatest project risks lie, so as to form a basis for devising a more cost-effective methodology for project monitoring (see the suggested structure of monitoring outlined in para. 3.23 above); and**

(b)   **find opportunities for project monitoring within the existing school audit practices. (For example, monitoring of both project inputs and process outputs could be included as a part of the schools' annual audit requirements.)**

Response from the Administration

3.25   The **Secretary for Education and Manpower** has said that:

(a)   she accepts the audit recommendations;

(b)   in line with government-wide effort to contain the size of the civil service, she has kept the QEF Secretariat small. Additional professional support and advice has been secured through appointing principals and teachers to the Steering Committee and its subcommittees, and recruiting on a need basis expert and external reviewers at a modest honorarium. As the QEF becomes popular and as applications have increased, the Secretariat, members of the Steering Committee and subcommittees have no choice but to focus on the processing applications; and

(c)   implementation of projects invariably follows the school calendar; hence, processing must be completed in around six months so that schools can have a few months to prepare for implementation in the following school year. As a result, the amount of time available to the Steering Committee for discussions on issues related to monitoring and dissemination has been limited. Likewise, the Secretariat can only provide limited support for such work during the application processing period. This is a problem that the Steering Committee itself has been wanting to address for some time.

Audit observations on financial monitoring

3.26   In the financial monitoring process, grantees are required to complete a periodic financial progress report detailing their actual expenditure against the budget plan. In the QEF Secretariat, monitoring project progress and financial reporting are conducted separately. Ideally these two monitoring functions are managed in an integral manner, but the pressure of work is such that this now appears to be rarely the case. Audit's review of 45 application/monitoring files suggests that the proactive management of projects with difficulties was not always practised, and that problems which should alert to the need to delay payment were not often identified.

3.27   Grants are paid out directly from the Treasury to a designated bank account of the grantee, based upon a timetable agreed at the commencement of the project and included in a schedule attached to the signed agreement. While this is a simple and efficient payment process, for some projects (particularly those with longer time-frames, complex deliverables or large budgets), it may be desirable to move to a system of payments linked to the achievement of performance milestones, reflecting actual delivery of outputs and achievement of objectives.

3.28   In keeping with the thorough approach to budget monitoring observed during the project selection stage, the QEF Secretariat retains a close oversighting role on expenditure during the life of the project.

3.29   Audit's review of monitoring of projects undertaken by the Secretariat and the external reviewers indicates that a rigorous but resource-intensive process is in place. However, the process is largely input-based and unlikely to reveal the early onset of management or financial problems. **The focus on inputs does not provide the QEF with insight into the impact of QEF funding.** Audit understands that the increasing workload undertaken by Secretariat staff has meant that monitoring is substantially slowed down for several months while selection of projects of a new call is underway. In mid-2000, staff responsible for financial monitoring and end of project budget reconciliation had a significant backlog of files to review.

3.30   At the end of the project, grantees are required to prepare a financial report and where necessary refund to the QEF any portion of the grant which has not been spent. Other than the final budget reconciliation undertaken by the Secretariat at the end of a project, there is currently no formal project closure or acquittal process.

3.31   Acquittal, which is considered a good practice, is the process by which a recipient demonstrates that the grant funds have been expended in accordance with the terms and conditions of the funding agreement. Administrative procedures to acquit grants on a regular basis are an important management control, although the stringency of such procedures should be balanced against the assessed level of risk and the cost of compliance for recipients.

3.32   For larger grants, more detailed evidence may be necessary to ensure that funds have been used for the approved purposes.

Audit recommendations on financial monitoring

3.33   **Audit has *recommended* that the Secretary for Education and Manpower should:**

   (a) **in line with good practice, ask the grant recipient, upon completion of the project, to provide:**

      (i)   **a certificate acknowledging that the grant has been spent in accordance with the terms and conditions of the grant and that the project is operating as planned; and**

      (ii) **a certified statement of expenditure (signed by a responsible officer) covering the period of the grant; and**

   (b) **for larger projects, explore the possibility of introducing a grant payment system linked to the achievement of performance targets, including interim targets. Such a system will minimise the risk of QEF projects not achieving the expected outputs.**

Response from the Administration

3.34   The **Secretary for Education and Manpower** has said that:

   (a) she accepts the audit recommendations; and

   (b) monitoring of projects' progress and outcomes is multi-faceted. Besides submission of reports, other means of monitoring include site visits, interviews, attendance at project functions and observation of the performance of grantees at dissemination functions

such as experience sharing sessions. Hopefully, these together will enable the external/expert reviewers and the QEF Secretariat to have a better idea of both the formal and non-formal but more subtle effects of the projects (e.g. cultural change). In addition, funding for large-scale projects is normally provided in phases with funding of subsequent phases hinging on the satisfactory completion of earlier phases, i.e. attainment of the stated objectives and delivery of the promised outcomes.

Audit observations on external monitoring

3.35 *External reviewers.* External reviewers have been engaged since 2000 to enhance the monitoring process, encourage participation of front-line workers in peer coaching and to establish a district network of professional teachers. High value and long running projects are monitored through the use of expert reviewers. The role of external and expert reviewers is to:

(a) make quantitative and qualitative assessment on the effectiveness of QEF projects; and

(b) advise the QEF whether the experience gained from the projects is worthy of dissemination.

3.36 For monitoring the project, the external reviewer is asked to carry out two or three site visits, to complete an evaluation of the interim progress reports, the final report and the deliverables.

3.37 *Review guidelines.* Guidelines provided to external reviewers suggest they should review whether and to what extent the project has achieved its objectives, whether it is cost-effective, whether the process is effective in terms of participation and response as well as team performance, and whether the project has successfully generated the planned outcome or derived additional ones. They are asked to record project strengths and weaknesses, identify any problems or constraints and record any good practices or useful experience worth sharing. Finally, their advice is sought on ways in which worthy projects should be disseminated.

3.38 *External reviewers and professional networks.* External reviewers benefit from the professional networks in which they participate. Some of them are project managers for QEF projects within their own schools or institutions. A small honorarium of $500 was paid to each external reviewer (who volunteer his time) largely to cover the costs for visiting projects. For larger, more complex and longer term projects where it is thought advisable to enlist the aid of overseas or other external experts, honoraria of up to $15,000 may be paid. By the end of March 2001, some 300 reviewers had reviewed 946 projects at a total cost of about $473,000 (i.e. $500 each).

3.39 One of the tasks of the external reviewers is to give advice on ways in which worthy projects should be disseminated (see last sentence of para. 3.37 above). However, Audit noted that very few of the 45 successful application files and the additional 12 evaluation files indicated that the reviewers had provided advice on dissemination methods. (In a few cases, invitations to exhibit

the project at the next QEF exposition had been made.) Audit's other observations on dissemination practices of the QEF are in PART 5.

3.40   The dedication required from the external reviewers in undertaking these tasks is quite considerable.   The evidence gathered from the Audit sample of monitored projects, as well as discussions with project staff and Committee members who also fulfil the role of reviewers, would suggest that the process is low key and supportive, but perhaps insufficiently structured to provide genuine guidance or firm control where necessary.

Audit recommendation on external monitoring

3.41   **Audit has** *recommended* **that the Secretary for Education and Manpower should evaluate the system of monitoring by external reviewers in order to ascertain:**

(a)   **the effectiveness of the system;**

(b)   **the manner in which useful findings of the external reviewers can be captured and disseminated to the broader educational community; and**

(c)   **whether the honoraria paid to the external reviewers are appropriate for the work they perform.**

Response from the Administration

3.42   The **Secretary for Education and Manpower** has said that she accepts the audit recommendation.

Fund management and Grants Programme

3.43   In order to generate reasonable growth in the value of the QEF Investment Fund (the Fund) whilst producing recurrent income to meet funding requests, a QEF Investment Committee had been set up since the establishment of the QEF in January 1998.

3.44   The Investment Committee is chaired by the Secretary for Education and Manpower and comprises the Chairman of the QEF Steering Committee, the Director of Education, and the Director of Accounting Services.   The Principal Assistant Secretary for Education and Manpower is the Secretary to the Committee.

3.45   The management of the Fund itself is the responsibility of the Director of Accounting Services.   Despite the draws on the Fund for grants to QEF projects over the past years, as at

31 August 2000 (the year end of the last audited annual account), the size of the Fund had increased beyond its original $5 billion size due to revaluation of investments and investment gains to $6.5 billion.

3.46   Currently, a very broad spectrum of projects is considered suitable for QEF funding. However, a further link needs to be made to ensure that the Fund better meets its core objective of financing projects that promote quality education. This is the link between fund management and the Grants Programme (see paras. 3.47 and 3.48 below).

Audit observations on
fund management and Grants Programme

3.47   Finance Committee paper FCR(97-98)81 dated 12 December 1997 provides a general guideline for the management of QEF funds. It was stated in paragraph 15 of the Paper that the QEF would adopt an investment approach which would generate a reasonable growth in the value of the Fund, *"whilst producing recurrent income to meet regular funding requests"*. In this context, Audit has the following observations:

(a)   there is no systematic reporting process between the management of the Fund and the Grants Programme. The financial performance of the Fund is not periodically discussed as an agenda item at the Steering Committee meetings. As a result, the risk exists that there may be a lack of awareness amongst the QEF grant assessors of the amount of money that is available for the QEF projects in the coming year. Consequently, grant assessors do not know if there is a need for financial prudence in determining applications for funding;

(b)   annual projections of the size of the Fund — and hence the revenue that is available to the QEF (with allowances for committed expenditure that must be paid in the coming year) is not provided to the QEF Secretariat at the start of the financial year. As a result, it is very hard to gauge the amount of available QEF funds that will be available for each call of the Grants Programme. Audit notes that for the two financial years of the Fund ended 31 August 1999 and 31 August 2000, the recurrent income of the Fund, in terms of interest and dividends, was $267.8 million and $264.2 million respectively. However, the actual expenditure for approved grants and expenses amounted to $344.1 million and $298.7 million respectively for the two years ended 31 August 1999 and 31 August 2000, which exceeded the total recurrent income received in these two financial years by about $110 million. (A summary of the financial position of the Fund is shown in Appendix E). Although there were considerable investment gains in these two years, the income generated is much less stable because of their non-recurrent nature. There is a need to monitor closely the Fund's financial position so as to ensure that the recurrent income will be able to finance the recurrent expenditure; and

(c)   no formal mechanism is currently in place to report the position of the Fund to the QEF Steering Committee, QEF Secretariat, the ED or the EMB.

Audit recommendations on
fund management and Grants Programme

3.48   Audit has *recommended* that the Secretary for Education and Manpower should:

(a)   **establish a formal reporting mechanism to enable the QEF Secretariat and QEF Steering Committee to monitor closely the level of annual expenditure against the financial position of the Fund, paying special attention to whether the recurrent income will be able to finance the recurrent expenditure; and**

(b)   **set a formal budget for all aspects of QEF operation, including the Grants Programme, Outstanding Schools Awards and the cost of QEF administration. Budget progress reports should be submitted regularly to the QEF Steering Committee.**

Response from the Administration

3.49   The **Secretary for Education and Manpower** has said that:

(a)   she accepts the audit recommendations; and

(b)   at present, information interflow between fund management and the Grants Programme is done through cross membership — Chairman of the QEF Steering Committee is a member of the Investment Committee and the Principal Assistant Secretary for Education and Manpower is the Secretary to both the Steering Committee and the Investment Committee. Nevertheless, she accepts that there is merit in exploring with the Steering Committee and the Investment Committee whether and how the links should be strengthened. Indeed, arising from the Investment Committee's concern about the cashflow position of the QEF, the Steering Committee was asked to review the scope and priorities of the grant programme for the coming years.

3.50   The **Director of Accounting Services** has said that he agrees with the audit recommendations.

PART 4:   PERFORMANCE MEASURES OF THE QEF

4.1   This PART examines the performance measures of the QEF projects and assess their adequacy in ensuring that the QEF objectives are met.

Performance measures used in advanced countries

4.2   To ensure that good value is obtained in funding educational projects, it is necessary that the criteria adopted by the QEF provide an accurate and complete view of these projects' achievements in securing value for money.

4.3   Before examining the performance measures of the QEF (see para. 4.7 below), it is useful to review the performance measurement techniques that are used in advanced countries. Audit studied the techniques used in Australia, Canada, the United Kingdom and the United States to assess the effectiveness of education projects (details are summarised in Appendix F). In these countries, monitoring whether best value is derived from the money used for delivering quality education services involves the use of:

   (a)   *Performance indicators.*   These indicators are essentially concerned with assessing the *outputs* delivered by a project; and

   (b)   *Performance measures.*   Performance measures are used to evaluate the *progress* achieved by a fund or project, usually on an on-going basis.   These measures are typically used to monitor the success of a fund (such as the QEF) over time.   To design meaningful performance measures, it is however required that adequate baseline data is available at the start of the evaluation period.   For example, a measure of success for an education programme could be "the year-on-year increase of the percentage of parents who indicate that the school actively encourages family involvement".

4.4   In summary, the study of practices in these advanced countries has revealed a number of key characteristics of performance indicators and measures:

   (a)   in defining **performance indicators**, it is essential to distinguish between the inputs to, and outputs and outcomes arising from, a funding programme or project.   In these advanced countries, the number of recipients (i.e. number of students, number of parents, number of computers purchased, number of publications distributed) is often regarded as an input;

   (b)   the number of key **performance indicators** applied to a funding project should be limited to around three to four.   This keeps the monitoring exercise manageable; and

   (c)   **performance measures** should draw on information that is commonly collected in the day-to-day management of the project.

4.5   Tables 5 and 6 below summarise some of the performance indicators and performance measures used in these advanced countries. These indicators and measures are commonly used to assess how the performance of an educational project (or funding body) has changed over time, as well as to explore how the project compares with others.

Table 5

Performance indicators used in advanced countries
(Illustrative examples)

Evaluation category	Performance indicator	Australia	Canada	United Kingdom	United States
Educational attainment	• Percentage of students with pre-determined number of examination passes	✓	✓	✓	✓
	• Percentage of students that meet national or state assessment standards	✓	—	✓	✓
	• Satisfaction of target groups with project outcomes	✓	✓	✓	✓
Research grants	• Number of refereed publications produced	✓	—	✓	✓
Special education provision	• Number of Special Needs Statements/programmes conducted	—	—	✓	✓
Fund/project management	• Percentage of projects that do not deliver expected project outcomes	✓	—	✓	—
	• Percentage of administrative cost for administering the fund	✓	—	—	✓

Legend: "—" means information not available.

Source: Audit's analysis of international practices

Table 6

Performance measures used in advanced countries
(Illustrative examples)

Evaluation category	Performance measure	Australia	Canada	United Kingdom	United States
Educational attainment	• Annual increase (%) of students with pre-determined number of passes in an examination	✓	✓	✓	✓
	• High school attendance and completion rates will continually improve (year-on-year)	✓	—	—	✓
	• Percentage of parents who indicate that the school actively encourages and facilitates family involvement will increase (year-on-year)	—	—	—	✓
	• Percentage increase in the number of students that successfully complete courses (year-on-year)	—	—	—	✓
	• Increasing percentages of teachers who feel well-prepared to implement higher standards (year-on-year)	—	—	—	✓
Research grants	• Increase in numbers of refereed publications produced (year-on-year)	✓	—	—	—
Fund/project management	• Ratio of administrative costs to grants meet pre-determined criteria	—	—	—	✓

Legend: "—" means information not available.

Source: Audit's analysis of international practices

4.6   The performance indicators and performance measures presented in Tables 5 and 6 are not exhaustive. They generally illustrate the types of indicators/measures that are typically applied to a range of educational institutions and projects in those advanced countries.

QEF performance measures

4.7   As mentioned in paragraph 3.11 above, the QEF has established procedures to monitor the success of recipient schemes, based on a set of evaluation criteria that reflect the objectives of the QEF. Evaluation criteria are intended to provide regular monitoring of progress against the targets specified by the applicant at the initial stage. As from 1 April 2000, the QEF conducts project evaluations at three levels, based on the following reports:

- Half-yearly financial reports (for projects of and below $100,000) or four-monthly progress reports (for projects over $100,000);

- Half-yearly progress reports (for projects of and below $100,000) or four-monthly financial reports (for projects over $100,000); and

- A final evaluation report at the end of the project (including the end of project financial report submitted by the grantee).

4.8   Each of these reports is completed by QEF assessors, making use of a number of performance indicators. These indicators are summarised in Table 7 below. In Table 7 below, Audit groups the QEF performance indicators into one of two categories:

(a)   *Input measures.*   These are indicators which measure the resources put into a project that make the final project benefits possible; and

(b)   *Output and outcome measures.*   In the advanced countries, these indicators are among those usually regarded as being the more appropriate way of measuring the value for money, and the effectiveness of projects. The major emphasis is on capturing the real outcomes of a project, and, in doing so, the question often asked is what effects the project has made on education quality.

Table 7

Selected QEF performance indicators

Evaluation report	Performance indicator	Input measure (Note)	Output and outcome measure (Note)
Periodic progress report	• Details of activities conducted to date	✓	
	• Number of participants	✓	
	• Participants' response		✓
	• Percentage of project completed	✓	
	• Is project on schedule?	✓	
	• Any difficulties encountered?	✓	
	• Identification of deliverables produced	✓	
Periodic financial report	• Various financial statements required	✓	
Final report	• Comparison of planned objectives with achieved objectives		✓
	• Details of implementation	✓	
	• Various financial statements required	✓	
	• Outcomes (i.e. publications generated)	✓	
	• List of equipment purchased	✓	

Source: QEF's records

Note: Classification of input and output and outcome measures is based on Audit's analysis of practices of advanced countries (see Appendix F).

4.9　　From Table 7 it is obvious that the majority of indicators used by the QEF measure inputs, as opposed to outputs and outcomes. QEF indicators are focussed on assessing project inputs (e.g. use of resources, capital items purchased, number of reports issued or seminars held) rather than project outputs and outcomes (e.g. whether the project delivers to recipients the intended real benefit?). The QEF appears to assess value for money in a different way to that employed in advanced countries that could be regarded as using "best practice". Audit observations on the key aspects of the QEF performance measures are given in paragraphs 4.10 to 4.15 below.

Audit observations on performance measures

4.10　　Audit appreciates that applying performance measurement techniques to education funds such as the QEF may be difficult. These techniques are still evolving overseas. Experts in advanced countries are seeking to refine their methods in this difficult area. In part, this is because an extremely wide range of projects receive government funding, and these projects generate an even wider range of outputs and outcomes. Consequently, many theories advocating different ways of assessing value for money exist. However, most accepted methods have a set of core principles that govern the way in which measures of value for money should be approached. These principles are associated with most leading public sector performance measurement tools. They comprise three key criteria — whether the measures are **relevant, bounded,** and **comprehensive,** and three technical criteria — whether the measures are **valid, reliable** and **consistent.** Audit compared the QEF's performance measures against the six criteria of a good performance measurement system, the results are given in Appendix G.

4.11　　The results of the comparison of the QEF measures against the six qualities of a good performance system are summarised below:

(a)　　the QEF evaluation framework meets some of the features associated with the six key qualities; but

(b)　　in further developing this monitoring and evaluation mechanism, the QEF should give priority to developing indicators and measures of outputs and outcomes, rather than inputs.

4.12　　In this regard, some illustrative performance indicators and performance measures applicable to the QEF are suggested in Tables 8 and 9 below.

Table 8

Performance indicators applicable to the QEF
(Illustrative examples)

(1)   Satisfaction of target groups with project outcomes;

(2)   Percentage of projects that significantly under-perform against expected project outcomes;

(3)   Number of schools which have never applied for QEF funding;

(4)   Number of applicants that re-apply for QEF funding;

(5)   Administrative costs maintained at a reasonable level;

(6)   Number of innovative projects;

(7)   Number of standard projects;

(8)   Number of projects that result in changes to the curriculum (for relevant projects only);

(9)   Level of family-school interaction (for suitable projects only); and

(10)   Number of students achieving pre-determined level of examination success (for suitable projects only).

Table 9

Performance measures applicable to the QEF
(Illustrative examples)

(1) Increase in number of effective projects that are replicated in other schools (year-on-year);

(2) Increase, in recipients' views, of the actual benefits delivered by the projects;

(3) Percentage decrease of projects that significantly under-perform against expected project outcomes (year-on-year);

(4) Increase in the satisfaction level of target groups with project outcomes (year-on-year);

(5) Increase in proportion of fund allocated to projects fostering innovation;

(6) Ratio of administrative costs to grants awarded does not exceed y%;

(7) Percentage increase of parents who have indicated that the school actively encourages and facilitates family involvement;

(8) Percentage increase of teachers who feel well-prepared to implement higher standards (year-on-year, for suitable projects only); and

(9) Percentage increase of students who successfully complete educational courses (year-on-year, for suitable projects only).

Need for evaluation methodology guidelines

4.13   To incorporate the six common criteria of a good performance measurement system into the QEF evaluation process, Audit's study of the practices of advanced countries has suggested that, ideally, an effective evaluation method should be able to deliver the following crucial information:

(a)   To what extent are the purpose, goals, and objectives of the programme achieved?

(b)   What proportion of the target population is served by the programme?

(c)   What is the intensity of participation in programme services by those served?

(d)   What are the outcomes of the programme (whether they were intended or not)?

(e)   What is the evidence of the programme's effectiveness in meeting its stated goals and objectives?

(f)   How can the programme be improved? And what factors have "facilitated" success?

4.14   A properly designed evaluation method is essential to ensure that QEF can effectively generate and capture learning outcomes from the particular project experience. **Nevertheless, Audit observes that some applicants have proposed limited consideration of the ways to evaluate the success of a project, once completed.** This occurs at the application stage, when the QEF is determining the suitability of a project for funding. Some deficiencies of the evaluation methods suggested by some applicants are shown below:

(a)   **there are no general guidelines for a well-designed and effective evaluation method for QEF applicants to follow, except for standard projects.** The actual project evaluation methodology proposed by the applicant is not made an explicit assessment criterion in the selection process. It may be implicit in the "Quality of project proposal" criteria (see para. 3.11(a) above) that is considered by the QEF grant assessors, and it is observed that some proposals were rejected owing to unreliable evaluation mechanism; and

(b)   **the objectives and goal setting of the QEF applications are often abstract and difficult to measure.** Quantified targets are not always established with well-defined performance indicators. Whilst there are targets in the form of project milestones and the volume of deliverables, measurements related to educational outcomes like skill and proficiency level etc. are not widely adopted. This makes it difficult to measure project outcomes at the evaluation stage.

4.15   **The QEF needs to develop guidelines on specific evaluation methodology for reference by applicants in developing proposals.**   Particularly, advice and assistance could be provided to applicants on how to develop robust performance indicators for measuring the effectiveness of a project, once completed.   This is also a common practice in education programmes in advanced countries, some of which even require the applicant to provide a detailed evaluation plan.   The following factors are normally considered in assessing the quality of the evaluation method:

(a)   the extent to which the methods of evaluation are thorough, feasible and appropriate to the goals, objectives and outcomes of the proposed project;

(b)   the extent to which the methods of evaluation include the use of objective performance measures that are clearly related to the intended outcomes of the project, and will produce quantitative and qualitative data to the extent possible;

(c)   the extent to which the methods of evaluation will provide performance feedback and permit periodic assessment of progress towards achieving the intended outcomes; and

(d)   the extent to which the evaluation will provide guidance about effective strategies suitable for replication or testing in other settings.

Audit recommendations on performance measures

4.16   **Audit has *recommended* that the Secretary for the Education and Manpower should:**

(a)   **develop guidelines on specific evaluation methodology for reference by applicants to assist them in preparing funding proposals;**

(b)   **require the submission of an explicit evaluation method and outcome measures in all funding applications and adopt these measures as key assessment criteria of applications. Applicants should be required to submit information on:**

(i)   **the proposed method of evaluating the success of the project (e.g. surveys of project end-users or recipients); and**

(ii)   **outcome performance indicators and performance measures to establish whether a project is successful with reference to its outcomes. (Examples of such performance indicators and performance measures are in Tables 8 and 9 of para. 4.12 above); and**

(c)   **consider assisting grantees to develop appropriate performance indicators and performance measures linked to the QEF objectives.**

Response from the Administration

4.17   The **Secretary for Education and Manpower** has said that:

(a)   the audit recommendations constitute a systematic approach to monitoring which merits serious consideration. She will invite the QEF Steering Committee and its Promotion and Monitoring Subcommittee to factor these into their consideration of how the monitoring work of the QEF can be enhanced;

(b)   monitoring and evaluation involve not just mere reporting; other means including site visits and interviews, etc. are also used;

(c)   broadly speaking, the performance indicators adopted by the QEF comprise the following:

(i)   whether the intended outcomes/products can be delivered;

(ii)   whether the project is on schedule; and

(iii)   whether the project is conducted within budget;

Depending on the nature of the projects, included in (i) are also intangible outcomes such as learning process, changes in outlook and value, etc. Nevertheless, she appreciates the possible advantages of a more detailed breakdown; and

(d)   at the risk of stating the obvious, however, the monitoring means and yardsticks cannot be applied to all projects in a uniform manner. For instance, it may be difficult to derive meaningful output indicators for projects such as air-conditioning. For projects with schools and students/teachers as the beneficiaries, a meaningful performance assessment should include cultural and behavioural changes, if any, which may be gauged by surveys and interviews. In fact, evaluation methodology is a highly technical subject requiring professional input and expertise. As borne out by experiences both in Hong Kong and overseas, development of effective performance indicators and measures for education practices and activities is a difficult area.

PART 5: DISSEMINATION PRACTICES OF THE QEF

5.1   This PART examines the dissemination practices of the QEF and suggests improvements.

Dissemination practices

5.2   The QEF Secretariat has devoted considerable time and effort to meeting the need to publicise the existence of the QEF, and to disseminate the output and results of projects which the QEF has supported. This Audit review suggests that the activities have performed well in terms of broad general awareness of the QEF, but that further work is required to develop a strategy that captures the wider benefits of the Grants Programme.

5.3   Since 1998 there have been three major expositions, five roving exhibitions and numerous Saturday talks and experience sharing sessions. Newsletters and a QEF website as well as a Cyber Resource Centre are also important elements of the dissemination process.

QEF Projects Exposition

5.4   Three expositions have been held to demonstrate the results of projects. Expositions provide a performance opportunity for schools which have established musical or physical activity groups with QEF funding. Display booths are complemented by seminars and workshops which are open to the public. QEF Secretariat staff have conducted forums to assist exhibitors prepare for the expositions, and to ensure a high standard of professional display and participation. More than 55,000 visitors attended the 2000 Expo held over four days at the Hong Kong Convention and Exhibition Centre when 228 projects were on display. The 2001 Expo was held from 9 to 12 March 2001. Three hundred grant recipients were invited to participate. The three QEF Expos cost the QEF about $10 million.

Roving Exhibitions

5.5   The roving exhibitions, of which there were five in 1999, served the same purpose as the projects exposition but on a smaller scale. Roving exhibitions were held in major shopping arcades in Hong Kong. Costs for these exhibitions amounted to $556,000.

Experience Sharing Sessions, Saturday Talks

5.6   Experience sharing sessions may be small gatherings of less than 50 people or they may attract as many as 600 attendees. In 1999-2000, 14 Saturday talk sessions were organised and publicised through notices to schools and related education bodies, and the QEF website. Some seminars and experience sharing sessions have been devoted to assisting potential applicants prepare grant applications. Initially, there was considerable emphasis upon simply advertising the

existence of the QEF to ensure that the widest possible cross section of applicants and proposals could be encouraged. Given the expansion in the number of applications, this has become less necessary. There may be an on-going need for the Secretariat to offer support for new applicants in the form of workshops. Regardless of their emphasis, it is clear that these activities were well received but resource intensive.

Newsletter

5.7   Launched in May 1999, three issues of the QEF Newsletter have been produced, the third appearing in January 2001. Each issue is informative, colourful, professionally produced with news, photographs and short contributed articles. All three issues are posted on the QEF website. Producing these issues of the Newsletter cost the QEF $235,000.

QEF website

5.8   The QEF has built and maintains an informative website which is updated regularly and provides general information on the organisation and administration of the QEF. Application forms and other project associated forms, such as those for periodic and final reporting, may be downloaded from the site.

Cyber Resource Centre

5.9   The QEF has set up a Cyber Resource Centre with a view to disseminating the deliverables and good experience of funded projects through the Internet. The Centre allows visitors to browse project information such as proposals, reports and other deliverables in QEF's project database using the Internet. The cost for setting up the Centre in the first year was $880,000.

Audit observations on dissemination practices

5.10   The dissemination activities described above are professionally run and well received and/or attended. Their organisation is clearly part of the QEF's remit to disseminate the good practices and experience of the funded projects across the education sector.

5.11   The main goal of disseminating what has been learned through the experience of funded projects is clearly being addressed. However, specific objectives for each element of the QEF dissemination strategy have not been spelt out. Measurable targets for different types of dissemination activities have not been set to gauge their success. It is difficult to assess the extent to which these dissemination activities have served to inculcate the participants with the learning and experience, and the level of knowledge that is disseminated broadly across the education sector.

Dissemination at school level

5.12   *Innovative projects.* Given that the QEF is aimed at fostering innovation in schools to bring in new ideas and methods and make changes to improve the quality of education, innovations need not be confined to a "one-off" project in one school. That is, given a more strategic approach to its operation, the QEF could develop a suite of innovations that may be made available to all schools in Hong Kong (see paras. 2.41 and 2.42 above).

5.13   *Professional development projects.* Professional development for teachers, or leadership programmes for school principals, generally have a greater potential to impact on pedagogy and student learning (Note 6). The real worth of professional development for teachers is the essential role it plays in the improvement of student learning. This means that professional development must be linked with the outcomes of research into teaching approaches that are proven to have a positive impact on learning outcomes. At the same time, each professional development effort should be accompanied by a well-designed evaluation plan for determining its effectiveness.

Adopting a proactive role

5.14   The QEF is in a strong position to take a proactive role (see paras. 2.41 and 2.42 above) in each of the following:

- acquiring professional development from providers;

- funding the design and delivery of evaluation programmes; and

- commissioning research.

5.15   Within this role the QEF can also influence the manner in which professional development activities are adapted to suit different contexts. Without this strategy there is a danger that a "one size fits all" approach to professional development might prevail. (Just as student learning is a complex process that must take into consideration a range of background and contextual factors, so must the professional growth of teachers.) To acquire teacher professional development, the QEF must ensure that professional development providers are adept at managing and meeting the learning needs of teachers and principals within the context of individual backgrounds and the nature of organisational development of particular schools.

Note 6:   *Gannicott and Throsby, Educational quality and effective schooling (United Nations Educational, Scientific and Cultural Organisation 1994).*

5.16   In this sense, the QEF could move from being solely a "fund-provider" of educational programmes and activities to taking on a dual role of being both a "fund-provider" and an "acquirer" of quality programmes. *The Enhancement of Learning Motivation in Schools* project, an exhibit at the March 2001 QEF Expo, serves as an example of what might be achieved in this area. Participants hold the teacher professional development component of this project in high regard. Despite its short duration, this professional development project has been demonstrated to make a positive impact on both teaching practice and the levels of motivation learning for the secondary students in the five project schools.

5.17   At present, there is a chance that the potential for this kind of programme to enhance the skills of a greater number of teachers will be lost at the conclusion of the funding cycle. However, if the QEF was to "acquire" this kind of programme and offer it as a professional development activity for all teachers, or as a funded activity linked to action research at the school level, then many more teachers and students in Hong Kong schools could potentially benefit from this innovation. As mentioned in paragraph 2.2 above, organisations such as the QEF creates value when their activities generate benefits that go beyond the purchasing power of their grants. By targeting the use of funds on the achievement of specific outcomes, the QEF is in a better position to create a culture that focuses on improving the quality education across Hong Kong schools.

5.18   In order for this scenario to take effect, the QEF would need to adopt a more strategic approach to monitoring the impact of funded projects. The QEF needs to determine which projects might move from being "one-off" pilots to "acquired programmes" that are offered to a broader number of schools. At the same time, research funding may be directed at longitudinal studies of the impact of QEF projects in order to evaluate the effectiveness of specific projects over an extended period of time.

5.19   With a more strategic approach to developing the criteria for funded projects (see PART 2), combined with broader dissemination of effective programmes by the QEF, there is potential for the QEF to prolong the existence of quality projects and attract a greater number of schools to high quality acquired programmes.

Large number of schools did not apply for QEF funding

5.20   The QEF will create more value if more schools apply for grants. However, according to the QEF survey completed in July 2000 which gathered information up to the third call of the QEF, only 56% of schools had taken the initiative to apply for the QEF Grants Programme. The results of the QEF survey are summarised in Table 10 below.

Table 10

Participation rates of the first three calls of QEF

Category	Number of schools	Number of new participants			
		1st call	2nd call	3rd call	Total
Kindergarten	767	61	78	58	197 (26%)
Primary	850	190	164	156	510 (60%)
Secondary	477	328	67	47	442 (93%)
Special	77	38	20	10	68 (88%)
Total	**2,171**	**617**	**329**	**271**	**1,217 (56%)**

Source: QEF (2000) Survey Report

Note: For the timing of these three calls, see paragraph 1.5 above.

44% of schools had not applied for any QEF funding according to the QEF survey completed in July 2000.   The same survey also asked non-participating schools about the reasons for not applying for QEF funding.   The respondents were encouraged to pick more than one of the following seven reasons:

(a)   "too much work is required to write up a proposal";

(b)   "our teachers are not yet ready for writing a proposal";

(c)   "we don't know how our project would be assessed";

(d)   "there is no need to apply for funding for the time being";

(e)   "I think my school/kindergarten is not eligible to apply";

(f)   "I was not aware of QEF's calls for applications"; and

(g)   "our school is a new one and only started operation in 1999".

Figure 1 below shows the responses from non-participating schools to the question: *"Why did your school/kindergarten not apply to the QEF for implementing a project?"*.

Figure 1

Reasons given for not responding to QEF calls for applications
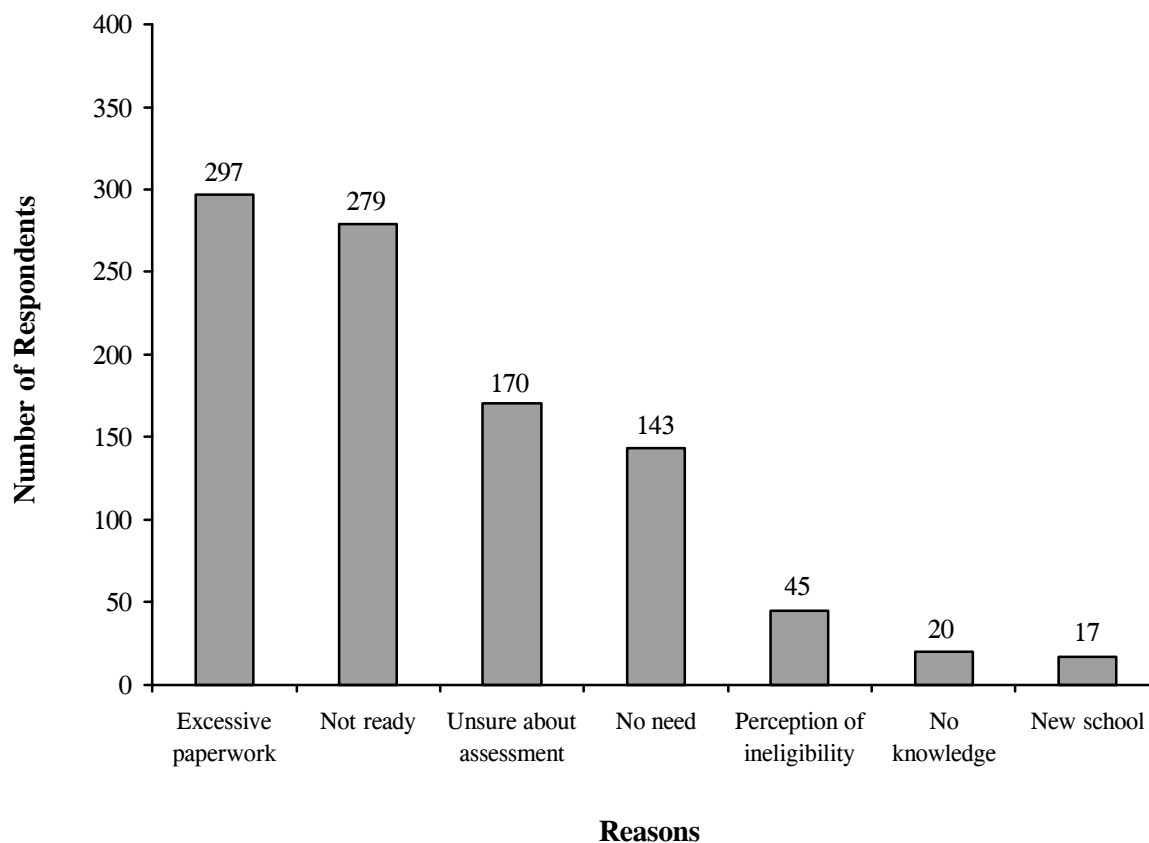
Source: QEF(2000) Survey Report

5.21   These schools cited excessive paperwork as the main reason for not applying for a QEF grant.   Other reasons related to process issues, such as assessment procedures are additional reasons for non-participation.

5.22   Even when prompted by the survey about the opportunities presented by QEF funding, 71 percent of respondents indicated undecided or negative response to the question: *"Would you apply for funding in the next call for applications?",* as illustrated in Figure 2.   Although respondents to this question were not required to elaborate on their responses, it may be assumed that concerns over excessive paperwork and the assessment process have contributed to the high level of indecision in the schools.

Figure 2

Potential applicants for future funding with QEF
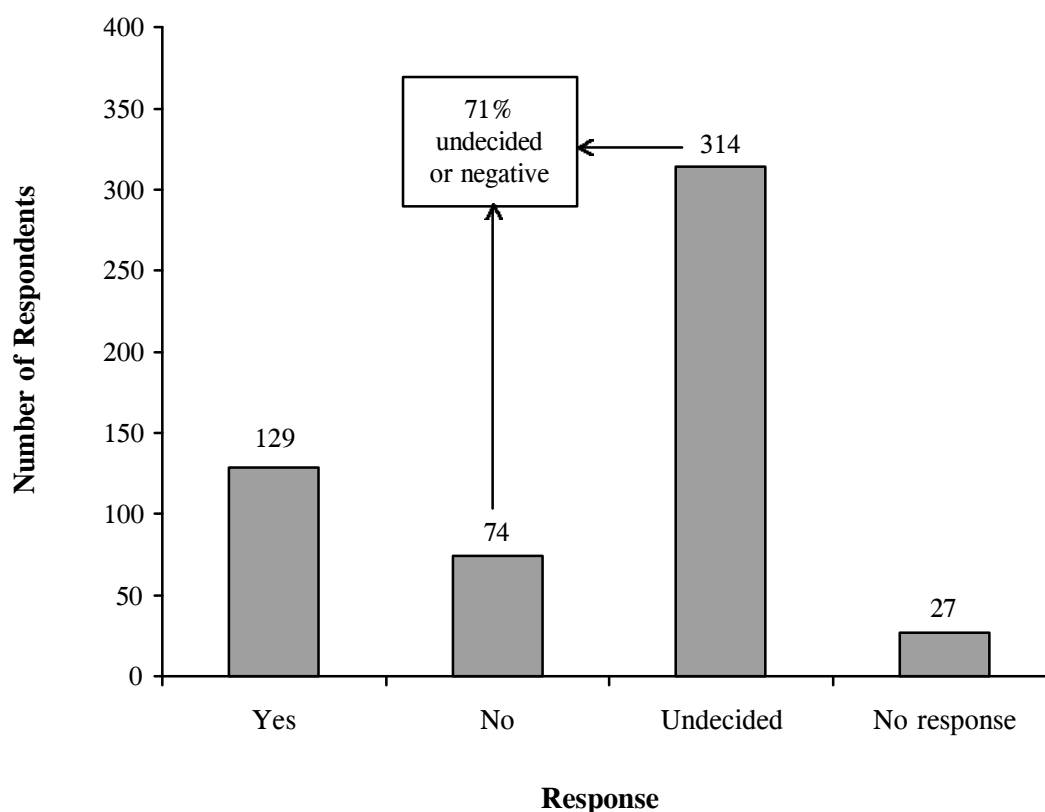
Source: QEF (2000) Survey Report

Evaluation of dissemination strategy

5.23   The creation of a dissemination strategy would ideally include an evaluation component. Evaluation thus far has only been in terms of participation and attendance at QEF events. Numbers attending Saturday sharing sessions, or visitors to Expo are recorded as performance indicators. Indeed the popularity of these events does provide a useful indicator of interest in the work of the QEF. Numbers do not, however, provide an indicator of the dissemination of the learning or experience gained through the use of QEF funds, particularly where projects only benefit a small number of students (such as those that fund excursions by students to China). For this to be assessed, an appropriate evaluation plan needs to be devised which establishes a mechanism for determining to what extent the experience is taken up by others either by replicating projects, revising their own work or proposal, or adopting practices or strategies observed or learnt.

Audit recommendations on dissemination practices

5.24   **Audit has *recommended* that the Secretary for Education and Manpower should:**

(a)   **adopt a proactive role in funding worthwhile projects by:**

    (i)   **acquiring useful and well-accepted professional development programmes from providers and make these programmes available to teachers;**

    (ii)   **funding the design and delivery of evaluation programmes to monitor the effectiveness of professional development programmes; and**

    (iii)   **commissioning research to find out the nature of student learning in specific areas of the curriculum to identify factors that influence learning outcomes;**

(b)   **undertake a review of the current dissemination activities to ensure that they are effective in capturing the useful experiences from funded projects;**

(c)   **in designing future dissemination activities, ensure that the activities are:**

    (i)   **oriented toward the needs of the users, incorporating the kinds and levels of information they need;**

    (ii)   **varied in its approach, including the use of written information, electronic media, and person-to-person contact;**

    (iii)   **both proactive and reactive in the use of dissemination techniques, (i.e. including information that users have identified as important, and information that users are likely to need). To achieve this, users need to make their wishes known to the QEF; and**

    (iv)   **inclusive of effective quality control mechanisms to ensure that information conveyed is accurate, relevant and representative;**

(d)   **formulate a more effective dissemination strategy, having regard to the recommendations made in paragraph 5.24(c) above;**

(e)   **streamline the processing of project applications by reducing paperwork so as to encourage more schools to participate in such projects; and**

(f)   **adopt an appropriate public relations strategy that should have direct links with the QEF's overall strategic plan.**

Response from the Administration

5.25   The **Secretary for Education and Manpower** has said that:

(a)   the audit recommendations provide useful pointers for the QEF Steering Committee and its Promotion and Monitoring Subcommittee to consider how the good practices of funded projects can be better and more widely and deeply disseminated and assimilated;

(b)   one of the key functions of the QEF is to identify and disseminate best practices of successful projects so that a broader school community can benefit through drawing reference from such practices and adapting them for application to other schools. To help ensure that the dissemination activities achieve their intended purpose, the QEF conducts surveys among participants of QEF expositions and holds Saturday talks;

(c)   the QEF is first of its kind in Hong Kong. Establishing the QEF's credibility is a prerequisite to achieving the objectives behind the setting up of the QEF. Therefore, the focus for the first few years has been on encouraging quality applications. A lot of efforts have been put to publicising the existence of the QEF, processing applications to ensure that the grants are not unreasonably difficult to obtain, and propagating the good practices of funded projects; and

(d)   also for the reasons which have been given in paragraph 3.25(b) and (c) above, while the QEF is mindful of the need for effective dissemination of good practices, the amount of time and attention given to dissemination is still below the desired level. To maximise the impact and sustainability of the good practices, she agrees on the merit of developing a strategic and effective dissemination plan which takes into account the roles of various stakeholders, as well as the desirability and feasibility of having the good practices incorporated into the day-to-day delivery of school education.

PART 6:   AWARDS PROGRAMME

6.1   This PART examines the Awards Programme of the QEF and suggests improvements by making reference to best practices in advanced countries.

Outstanding Schools Award

6.2   The Outstanding Schools Award (OSA) was initiated by the QEF in accordance with the recommendations of ECR7. The objectives of the OSA are to:

   (a)   give recognition and encouragement to schools with excellent performance;

   (b)   promote and disseminate schools' excellent education practices; and

   (c)   cultivate a quality culture within the school sector to strive for excellence having regard to the schools' unique conditions.

6.3   The OSA commends schools for demonstrating excellent practices in four educational domains:

   (a)   Management and Organisation;

   (b)   Teaching and Learning;

   (c)   Support for Students and School Ethos; and

   (d)   Students' Attainment.

Nominations and adjudication process

6.4   In June 1999, schools in Hong Kong were invited to nominate themselves or be nominated by others for an OSA. Each nomination had to be initiated by at least two nominators including at least one from the school body and one from outside the school. The OSA guidelines require schools accepting a nomination in one or more of the four domains to provide significant supporting materials to establish evidence of the claims for excellence. Materials are expected to demonstrate at least three years of activity in the domain for which the school was nominated.

6.5   Detailed award criteria have been drawn up to assist schools in developing their supporting evidence. It is understood that the OSA is a self-initiated "certification" exercise rather than an external audit. Nominated schools are not to be seen as competing against each other, but

rather against determined, widely understood and agreed standards. It is expected that the process of nomination in itself encourages schools' self reflection, and continuous learning and improvement.

6.6 Adjudication Sub-Panels have been established for each of the four domains and detailed award criteria and grade descriptors developed to provide targets of performance for practitioners and schools.

6.7 The OSA received a total of 211 nominations, with 184 schools (or 9% of the total number of schools) being nominated for 312 Awards across the four domains. The processing of OSA nominations included five stages:

Stage One:	Submission of nomination forms by nominators to the QEF Secretariat (June 1999 to October 1999)
Stage Two:	Initial assessment by OSA Adjudication Sub-Panels (December 1999 to January 2000)
Stage Three:	Members of the Adjudication Sub-Panels conducted site visits (February to June 2000)
Stage Four:	Final selection by OSA Adjudication Panel (mid-June to July 2000)
Stage Five:	Awards presentation ceremony (from July 2000 onwards)

6.8 Nominated schools which progressed beyond Stage Three and were assessed to have attained a "good" performance in the nominated domain would be presented with a Certificate of Merit in recognition of their performance in that area.

6.9 The results of the OSAs were announced by the QEF in July 2001. A total of 21 schools received 24 awards, including 6 OSA and 18 Certificates of Merit.

Audit observations on OSA adjudication process

6.10 It was originally expected that the announcement of the OSA would be completed by around June 2000. However, several factors had contributed to process delays where the outcome of deliberations was eventually announced in July 2001. These factors included:

    (a)   the overwhelming response by schools which greatly exceeded the original expectations (i.e. about 60 schools being nominated);

(b)   the exhaustive assessment criteria by which the outstanding schools were being judged. To apply rigour to the process as well as aligning with the ED's Quality Assurance Inspections, the OSA required adjudicators to examine the evidence supplied by schools against the award criteria. Schools submitted evidence in a variety of formats and in varying degrees of detail. One school submitted ten boxes of documented evidence. Although the process of determining outstanding schools was not competitive or comparative, the lack of consistency in the submission of evidence had made the task of adjudication very difficult; and

(c)   the requirement to undertake school visits for those schools deemed to have provided sufficient evidence for continuation in the process had required the coordination of teams of volunteers to take time out from normal routines in order to inspect the nominated schools.

6.11   To alleviate workload pressure, the QEF Secretariat had sought to pay for clerical support for adjudicators and to engage eight paid advisers to support the process for each of the categories. However, only two full-time and one part-time persons could be appointed (Note 7).

6.12   Despite the sense of rigour applied to the process and the detailed nature of the criteria assigned to each category, adjudicators had still experienced difficulties where borderline cases became evident.

6.13   The adjudication process presents the QEF with an opportunity for informing the future directions of the QEF. Through the lengthy considerations of what constitutes quality in the context of Hong Kong education, the OSA task group has created a body of knowledge that will be very useful in determining potential areas of targeted funding in the future.

6.14   This understanding is evident within the OSA Adjudication Panel and there is a genuine desire to make use of the knowledge that has been gained. The panel regards the adjudication process to represent only a third of the role of the OSA. The other roles relate to the dissemination of good practice and the ultimate improvements that will occur through the embedding of a quality culture in Hong Kong schools. The OSA sees the recently restructured Regional Education Offices as key agents in the dissemination strategy. However, this will require significant professional development and the establishment of a dissemination strategy in order for this to be achieved.

Practices of advanced countries in selecting outstanding schools

6.15   Schools award schemes similar to the OSA are also in operation in advanced countries. In Australia, Queensland has an awards structure comparable to the OSA. The *Showcase Awards for Excellence* were introduced in 2000 to recognise, celebrate and reward school practice that has significantly improved educational outcomes for students. Notably, the award has only one

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Note 7:   *All other applicants were deemed not to have had suitable qualifications or background experience to carry out this task.*

criterion for selection awardees: *Contribution of the identified practice to significantly improve student educational outcomes.*

6.16   In Canada, the Alberta Initiative for School Improvement provides funding, above and beyond basic school grants, to schools wishing to fund local initiatives and research. The goal of the initiative is to improve student learning and performance.

6.17   In the United Kingdom, "Beacon Schools" are schools that have been identified by the central government as amongst the best performing in the country. To be considered as "excellent" primary schools, most candidates for Beacon School status have to be in the top 15% of their socio-economic band in respect of their nationally standardised test results for each of the previous three years. In order to be considered, secondary schools have to be both "excellent" and "improving". Their external examination results for students at the age of 16-plus must be in the top 10% of their socio-economic grouping in each of the previous four years, and they must have improved their performance by more than twice the national average rate of improvement over that period.

6.18   In the United States, a range of national foundations, like the QEF, seek to stimulate innovation and excellence by supporting educational programmes that are outside the normal public funding. For a school to be judged deserving of national recognition, it must show significant progress in meeting the state and the national goals, must offer an instructional programme that meets the highest standards, and must have attained a standard of overall excellence that is worthy of respect and emulation by schools elsewhere of similar size and characteristics.

6.19   Audit notes that whilst different countries use different criteria for judging performance of schools deserving awards for excellence, academic performance of the students is a commonly used criterion or indicator for adjudicating the performance of a school. In Hong Kong, the award criteria for the four domains of the OSA are shown in Appendix H. Detailed award criteria for "Students' Attainment" are shown in Appendix I.

6.20   It appears that the criteria used by the QEF to measure students' attainment (see Domain Four of Appendix H and Appendix I) make little reference to the academic performance of students. However, the academic performance of students reflects the level of achievement or improvement in student learning attained by a school. Adequate recognition of the academic performance, or improvement in performance, is in keeping with practices of advanced countries in measuring outstanding schools. Due weight should be given to the academic achievement of students.

Audit recommendations on OSA adjudication process

6.21   **Audit has *recommended* that the Secretary for Education and Manpower should:**

(a)   **develop a plan to capture the learning that has been acquired through the OSA process. The plan should aim at capturing details of the organisational characteristics of highly effective schools and the means by which these are achieved;**

(b)   **devise an approach for the QEF to disseminate the acquired learning to the broader educational community;**

(c)   **conduct a review of the OSA process to streamline the adjudication process and determine the manner in which future awards should be decided; and**

(d)   **consider giving suitable recognition to the academic achievement of students in assessing schools for the OSA.**

Response from the Administration

6.22   The **Secretary for Education and Manpower** has said that:

(a)   she accepts the audit recommendations; and

(b)   in line with the emphasis the education reform puts on fostering students' all-round development, the OSA adjudication focussed on students' balanced attainment in, and adding value to the five areas of moral and ethical development, intellectual development, physical and emotional development, social development and aesthetic development. Academic performance is but one facet of intellectual development.

Outstanding teachers award

6.23   Both the ECR7 and the 2000 Education Reform programme place particular emphasis on the need to raise professional teaching standards and provide support to teachers across all education sectors. In paragraph 4(d) of the Finance Committee paper of December 1997 approving the setting up of the QEF, it was stated that awarding excellence in the performance of teaching would effectively disseminate good practices and promote healthy competition across the teaching profession. It would also help maintain morale and enhance the esteem and social status of good teachers.

Audit observations on outstanding teachers award

6.24   More than three years have lapsed since the establishment of the QEF in January 1998. However, the development of an outstanding teachers award has not been completed.

6.25   The complex process undertaken in selecting schools for the OSA may have dissuaded the QEF from proceeding to the development of an outstanding teachers award. However, the expectations placed upon teachers, and the difficult conditions in which some of them work, point to the need for some rewards and recognition on a regular basis. Audit notes that as an initiative by the ED to promote the image of teachers, each school nominates two teachers to receive commendation and invitation to the "Salute to Teachers" programme each year. The ceremony for the latest such event was held in February 2001. This teachers award is organised jointly by the teachers' associations, school councils and the ED.

6.26   In some Australian States, teachers awards are conducted by organisations that are detached from the respective state and territory education authorities. In Victoria, for example, one of the main daily newspapers conducts an annual awards programme in association with a major university to select outstanding teachers in four categories. The categories and broad criteria are listed as follows:

Category	Criteria
Primary and secondary teacher of the year	A substantial commitment to excellence in teaching Outstanding contribution to the school community Innovation and effectiveness in teaching methods
Primary and secondary teaching team of the year	A substantial commitment to excellence in teaching Outstanding contribution to the school community Innovation and effectiveness in teaching methods
Primary and secondary graduate recruit of the year	Commitment to student learning Positive relationships with the school community Effectiveness in classroom teaching practice
Best use of learning technologies in the classroom	The significant effect of their teaching practices on student learning in the classroom Contributions to professional development of their colleagues in this area Innovation and effectiveness in the use of new technologies

6.27   The QEF may wish to note and share the experience from the local and overseas parties concerned for the development of an outstanding teachers award.

Audit recommendations on outstanding teachers award

6.28 **Audit has *recommended* that the Secretary for Education and Manpower should:**

  (a) **take measures to introduce an outstanding teachers award at an early date. This will help elevate the status of teachers and raise teaching standards which are crucial for attaining the objectives of the QEF; and**

  (b) **when designing measures to introduce an outstanding teachers award, draw on the knowledge of local organisations and organisations in advanced countries, which are experienced in operating similar award schemes.**

Response from the Administration

6.29 The **Secretary for Education and Manpower** has said that it was the conscious decision of the EC to defer the launch of the Outstanding Teachers Award scheme after the completion of the OSA exercise. As far as the OSA is concerned, the priority now is to study in greater details the experience of the OSA awardees with a view to identifying the good practices for dissemination.

Statistical summaries of the first four calls

(a) Summary of applications received

Beneficiary sector	First call (No.)	($ million)	Second call (No.)	($ million)	Third call (No.)	($ million)	Fourth call (No.)	($ million)	Total (No.)	($ million)
Pre-primary	139	80	218	88	216	75	342	120	915	363
Primary	490	461	614	343	1,052	701	1,374	951	3,530	2,456
Secondary	1,533	1,125	1,020	677	1,528	1,424	1,389	1,699	5,470	4,925
Special	84	41	133	77	200	105	166	88	583	311
Cross sector	122	562	175	690	228	829	236	1,050	761	3,131
Total	**2,368**	**2,269**	**2,160**	**1,875**	**3,224**	**3,134**	**3,507**	**3,908**	**11,259**	**11,186**

Source: QEF's records

(b) Summary of applications approved

Beneficiary sector	First call (No.)	($ million)	Second call (No.)	($ million)	Third call (No.)	($ million)	Fourth call (No.)	($ million)	Total (No.)	($ million)
Pre-primary	67	9	46	7	125	15	123	16	361	47
Primary	145	84	180	43	555	232	652	225	1,532	584
Secondary	259	135	316	95	758	440	682	621	2,015	1,291
Special	28	9	34	8	92	27	74	14	228	58
Cross sector	24	134	41	61	74	294	66	293	205	782
Total	**523**	**371**	**617**	**214**	**1,604**	**1,008**	**1,597**	**1,169**	**4,341**	**2,762**

Source: QEF's records

(c) Breakdown of approved projects by category

Project category	1st call	2nd call	3rd call	4th call
Effective learning	20%	19%	17%	12%
All-round education	51%	43%	42%	26%
School-based management	10%	13%	15%	13%
Information technology	16%	24%	25%	32%
Educational research	3%	1%	1%	1%
Air-conditioning (Note)	–	–	–	15%
Notebook computer (Note)	–	–	–	1%
Total	**100%**	**100%**	**100%**	**100%**

Source: Audit's analysis

Note: These two project categories were created in the fourth call towards the end of 2000.

(d) Successful applications by project category

Project category	Number of approved projects				Average funding per project ($)				Success rate			
Call	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Effective learning	106	119	271	194	930,530	258,966	675,811	512,021	27%	35%	49%	39%
All-round education	268	261	681	414	224,688	196,132	235,458	293,749	28%	28%	51%	36%
School-based management	54	80	235	218	783,633	395,839	459,371	481,206	16%	36%	59%	53%
Information technology	82	149	401	515	1,695,930	621,551	1,278,467	1,087,682	14%	23%	46%	45%
Educational research	13	8	16	14	2,393,785	1,002,488	2,697,063	1,501,743	21%	22%	27%	33%
Air-conditioning (Note 1)	–	–	–	241	–	–	–	261,052	–	–	–	89%
Notebook computer (Note 1, Note 2)	–	–	–	1	–	–	–	396,408	–	–	–	100%
Total projects	**523**	**617**	**1,604**	**1,597**	–	–	–	–	–	–	–	–
Average funding per project ($)	–	–	–	–	**710,046**	**347,335**	**627,969**	**732,207**	–	–	–	–
Overall success rate	–	–	–	–	–	–	–	–	**22%**	**29%**	**50%**	**46%**

Source: Audit's analysis

Note 1:   These two project categories were newly created in the fourth call towards the end of 2000.

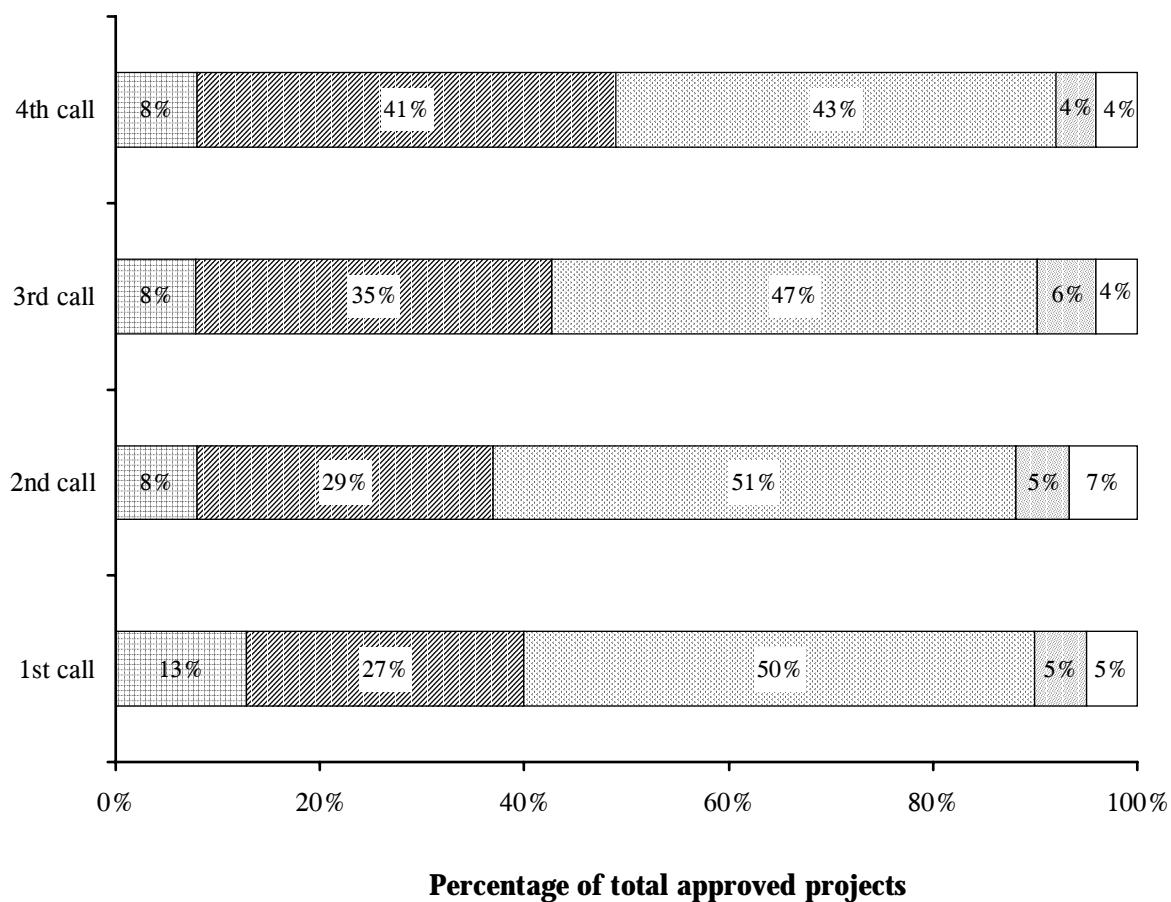*Note 2:   The provision of notebook computers to 503 secondary schools.*

Note 3:   The average funding per project for the third and fourth call was about $680,000.

(e) Successful applications by beneficiary

Beneficiary sector	Number of approved projects				Average funding per project ($)				Success rate			
Call	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Pre-primary	67	46	125	123	140,613	147,446	116,409	129,934	48%	21%	58%	36%
Primary	145	180	555	652	577,558	237,292	418,522	345,491	30%	29%	53%	47%
Secondary	259	316	758	682	520,248	302,359	579,946	909,964	17%	31%	50%	49%
Special	28	34	92	74	313,911	235,941	291,875	193,229	33%	26%	46%	46%
Cross sector	24	41	74	66	5,610,571	1,493,734	3,972,695	4,442,392	20%	23%	32%	28%
Total applications	**523**	**617**	**1,604**	**1,597**	–	–	–	–	–	–	–	–
Average funding per project ($)	–	–	–	–	**710,046**	**347,335**	**627,969**	**732,207**	–	–	–	–
Overall success rate	–	–	–	–	–	–	–	–	**22%**	**29%**	**50%**	**46%**

Source: Audit's analysis

(f) Breakdown of approved projects by beneficiary

4th call	8%	41%	43%	4%	4%
3rd call	8%	35%	47%	6%	4%
2nd call	8%	29%	51%	5%	7%
1st call	13%	27%	50%	5%	5%

Percentage of total approved projects

Legend:
☐ Pre-primary
☐ Primary
☐ Secondary
☐ Special
☐ Cross sector

Source: Audit's analysis

Examples of ED projects approved in the first four calls

Project title	Beneficiary schools	Duration in years	Grant approved
			($ million)
Development of performance indicators for measuring (a) primary and secondary students' performance in affective and social domains and (b) value-added improvement of primary and secondary students' academic performance (No.1998/1376)	Primary Secondary	3.4	8.5
Study of Effectiveness of Public Sector Secondary Schools (No. 1998/2325)	Secondary	3.5	4.3
Primary Schools English Development Scheme (No. 1999/0202)	Primary	2.2	47.8
Multi-media Digital Reading (No. 1999/0608)	Primary	1.1	4.5
Improving the Quality Education for All (IQEA) (No.1999/2725)	Primary Secondary Special	2	1.4
Scheme for Co-Teaching on Chinese Language by Language Teachers from the Mainland (No. 1999/2442)	Primary Secondary	2.6	6.0
Developing the Potential of High Ability Students for Hong Kong (No. 1999/2691)	Primary Secondary Special	2.4	10.0

Project title	Beneficiary schools	Duration in years	Grant approved
			($ million)
Hong Kong Education City (No. 1999/3223)	Pre-primary Primary Secondary Special	2	31.9
Enhanced Manpower Resources for Fostering the Use of IT in Education in Public Sector Schools (for 2001/02 school year) (No. 2000/1474)	Primary Secondary Special	1	161.8
English Language Learning in Hong Kong Primary Schools Programme — Phases II & III (No. 2000/3032)	Primary	2.1	7.3
Schools' Professional Collaboration Project (No. 2000/3259)	Primary Secondary Special	2	13.1
Ensuring Enhancement of English Language across the Curriculum through Professional Teacher Development (No. 2000/0721)	Secondary	1.5	3.4
		Total	**300.0**

Source: QEF's records

**Examples of tertiary institutions projects approved
in the third call and fourth call**

Project title	Beneficiary	Duration in years	Grant approved
			($ million)
Utilisation of Neuro-cognitive Science for the Improvement of Language Education in Hong Kong (No. 1999/0308)	Pre-primary Primary	2.6	22.8
A Pilot Scheme on Using Putonghua as the Medium of Instruction in Chinese Language Teaching (No. 1999/2084)	Primary Secondary	2.1	5.2
Progress in International Reading Literacy Study: The Current State of Reading Literacy at Primary Level in Hong Kong and Approaches Towards Enhancing the Quality of the Teaching and Learning of Reading (No. 1999/2939)	Primary	2.5	2.6
The Hong Kong–Programme for International Student Assessment Project: Monitoring the Quality of Education in Hong Kong from an International Perspective (No. 2000/0010)	Secondary	2.9	8.2
Neuropsychological Intervention Programme for Primary School Underachievers — A Research Project (No. 2000/2895)	Primary	1.0	1.2
		Total	**40.0**

Source: QEF's records

Funding sources for quality education initiatives

Description of Specific Initiative	Funding source						
	IT in Education	Education Reform Package	Language Fund	Committee on Home-School Cooperation	Environment and Conservation Fund	Research Grant Council (UGC)	Quality Education Fund
Effective Learning:							
— Parent-child reading schemes			✓				✓
— Writing schemes			✓				✓
— Native speaking English teacher schemes			✓				✓
— English language programmes			✓				✓
— Putonghua teacher training			✓				✓
— Integrated education		✓					✓
All-round education:							
— Environmental protection campaign					✓		✓
— Curriculum development					✓		✓
School-based Management:							
— Teacher development							✓
— Home-school cooperation activities		✓		✓			✓
— School-based activities		✓					✓
— Air-conditioning		✓					✓
Information Technology:							
— Computer-aided learning centres (e.g. multi-media learning laboratory)	✓		✓				✓
— Computer hardware and equipment	✓						✓
— Education software development	✓						✓
— Curriculum integration	✓						✓
— School management system							✓
Educational Research:							
— Computer-aided learning						✓	
— Physical education						✓	
— School-based Management						✓	
— Teacher development						✓	
— Language development						✓	
— Curriculum design						✓	
— Quality indicators and school effectiveness						✓	✓
— Creativity tools						✓	✓
— Reading and writing						✓	✓

Source: Audit's research

Note: "✓ "   represents item supported by the specific funding source (based on previously funded projects).

Financial position of the QEF
(up to 31 August 2000)

	1 February 1998 to 31 August 1998	1 September 1998 to 31 August 1999	1 September 1999 to 31 August 2000
	($ million)	($ million)	($ million)
(a) Opening balance	5,000.0	4,802.8	6,020.9
(b) Income:			
(i) Interest and dividends	278.0	267.8	264.2
(ii) Gain on sale of investments	1.1	223.5	94.2
(iii) Revaluation of investments	(475.1)	1,070.9	401.1
	(196.0)	1,562.2	759.5
(c) Expenditure:			
(i) Grants	1.1	337.2	283.6
(ii) Incidental expenses	0.1	6.9	15.1
	1.2	344.1	298.7
(d) Closing balance (a) + (b) − (c)	**4,802.8**	**6,020.9**	**6,481.7**

Source: QEF's records

PERFORMANCE MEASURES OF SOME ADVANCED COUNTRIES

Coverage of review

1.   As part of this audit, a series of overseas case studies were conducted. The results of this exercise are summarised in this Appendix. The mechanisms for evaluating the value for money achieved by education funds overseas were reviewed to identify the range of issues and complexities involved in assessment. Specifically, Audit draws lessons from practice of advanced countries for the way in which the QEF is evaluated in Hong Kong. The countries included in the review were:

(a)   Australia;

(b)   Canada;

(c)   United Kingdom; and

(d)   United States.

Australia

Summary of Funding Programmes

2.   Education is delivered at the state level largely with funds provided by the national government according to an agreed formula based on a range of criteria including socio-economic status of the student population. Recent attention has focussed on raising educational standards through the introduction of standardised tests and agreement to goals and targets which measure progress against national standards in such things as literacy, numeracy, school retention rates, vocational education and IT competency.

3.   Australia does not have a national programme equivalent to U.K. Beacon Schools (see para. 17 below) or U.S.A. Blue Ribbon Schools (see para. 23 below). However, in some States, award programmes, similar to the OSA of the QEF, are conducted by private organisations or state and territory education authorities. In addition, the Australian Commonwealth Department of Education, Training and Youth Affairs (DETYA) has recently initiated a project to develop a National Quality Assurance Framework. The Framework is to assist schools to identify, monitor and assess schooling and teaching practices that lead to measurable and improved learning outcomes for students. As an integral part of project, DETYA is seeking to develop options for a national awards scheme. This scheme will be grounded in the quality assurance framework and will give distinctive recognition to quality schools and to teachers who deliver quality outcomes.

4.   The State of Victoria engages external personnel to support processes to monitor school effectiveness. Whilst the process does not contribute to the achievement of awards or monetary gains for the schools involved, it is informative in the manner in which external consultants are engaged to validate school-based evaluations.

5.   Several thousand Charitable Trusts and Foundations in Australia distribute millions of dollars each year across a range of sectors that include education, the arts, welfare, health, the environment and medical research.

Measuring Performance

6.   There are a number of principles which govern the development of performance measurement in Australia. Indicators are typically developed to monitor three stages of a project:

(a)   *Project inputs* — indicators should measure the cost of administering project; costs of processing applications; number of processing errors/appeals against decisions;

(b)   *Project outputs* — the deliverables produced (number of completed projects; number of new applicants; number/value of grants awarded); and

(c)   *Project outcomes* — level of usage of facilities provided by the grant; level of community involvement; level of service delivery.

7.   With respect to grant programmes directed at the education sector, the Australian Research Committee administers both a Small Grants programme and a Large Grants programme. The Committee maintains a schedule of performance indicators that are applied to evaluate project outputs and outcomes. Considerable attention has been paid to the use of peer review in the selection of projects for funding, and to a lesser extent in evaluating outcomes.

8.   The Australian experience has been that targeted funding may well be a more effective mechanism for achieving specific objectives.

9.   Where funds are provided for the establishment or enhancement of school facilities, a different set of performance criteria come into play. Typically, it is relatively straightforward to determine whether, for example, the facility has been built, renovated, or purchased. However, the more meaningful indicator is the educational outcome of such construction, enhancement or purchase.

Canada

Summary of Funding Programmes

10.   Education in Canada is a Provincial responsibility. Each Province has a Ministry for Education, and it is this Ministry that is accountable for finances directed towards education. There are a number of funding programmes that are operated at the Provincial level in Canada that have objectives similar to those of the QEF. Examples are:

(a)   Alberta Initiative for School Improvement; and

(b)   Learning Initiatives Programme.

Measuring Performance

11. The Office of the Auditor General in Canada is responsible for monitoring the performance and value for money of educational funds. This is done by the appropriate office in each of the Provinces (e.g. Ontario). However, most of the performance measures adopted by the Provincial Councils relate to the management of funding schemes, and projects that receive funding. Few seek to measure outputs and outcomes in the rigorous fashion that is evident in the United States, Australia and the United Kingdom. However, some of the more relevant evaluation objectives are summarised below:

(a) programme officers must understand who is eligible for funding, under which conditions, for what purposes, and in what amounts;

(b) projects are evaluated to ensure that funding has been used for the purposes agreed; and

(c) management reporting (on an annual basis) by recipients of funding must demonstrate a good knowledge of programme performance.

12. Clearly, all of these attributes are strongly concerned with evaluating inputs to a project. Output and outcome monitoring in Canada seems less well developed, and performance indicators tend to focus on the extent to which operational targets or milestones, budget allocations, and deliverables produced by the project (as compared with those predicted at the time funding was approved). Nevertheless, all indicators focus on the need to "improve performance". The current baseline is determined before a project is funded, and then year-on-year improvements are expected thereafter. Demonstrating improvements is often a prerequisite for continued funding.

13. One evaluative programme operated by Provincial Governments throughout Canada that is expressly concerned with monitoring outputs and outcomes, is the School Achievement Indicators Programme (SAIP). The SAIP measures the achievements of a sample of 13–16 years old throughout Canada. The performance measures are very "achievement focussed", and concentrate on monitoring quantitative measures such as examination scores and attendance rates. The results of each Province (and sub-Provinces) are compared against those of another.

United Kingdom

Summary of Funding Programmes

14. In the past the United Kingdom had a series of grant programmes aimed at supplementing existing government funding programmes in order to foster innovation in schools. Grants for Educational Support and Training (GEST) provides Local Education Agencies (LEAs) with lists of potential projects covering areas such as curriculum development, teacher training and the purchase of equipment. LEAs then bid for a share of the funds allocated to each project. In 1997, the GEST arrangements were reviewed and re-launched as the "Standards Fund" with a focus on performance improvement in direct response to government priorities.

15. A key change from previous arrangements is that, with minor exceptions, the Standards Fund allocations are now made by formula, not bidding. LEAs are informed of their provisional grant (based on school population and a variety of socio-economic and other weighting factors) and are asked to confirm that they will be able to spend it in line with government priorities.

16.   At present, virtually all the Standards Fund opportunities are "match funded"; i.e. the LEA has to match the government's support by providing 50% of the money required from its own resources. This has been another means of ensuring that the funds are used for priorities that have already been identified and not simply as a bonus or substitute for local funding.

Beacon Schools Initiative

17.   "Beacon Schools" are those determined by Office for Standards in Education (OFSTED — an independent watchdog on behalf of central government) as being amongst the best performing in the country. To be considered as "excellent" primary schools, most candidates for Beacon School status have to be in the top 15% of their socio-economic band in respect of their nationally standardised test results for each of the previous three years. In order to be considered, secondary schools have to be both "excellent" and "improving".

18.   There are now around 550 Beacon Schools (out of a total cohort of about 26,000) which receive enhanced funding, direct from central government, in order to enable them to work in partnership with other schools. Most use their additional funding to enhance their teacher staffing establishments, so that they are able to release teachers more easily to work with other teachers elsewhere.

Measuring Performance

19.   The spending of Standards Fund monies is rigorously monitored by central government, not simply in terms of financial probity but also through a process of regular reporting against agreed performance targets from LEAs and schools. This monitoring is reinforced by direct inspection of LEAs and schools, every four years or so, by teams from the OFSTED.

20.   Each year the U.K. Audit Commission draws up a list of indicators for measuring the performance of local authorities. The authorities must then publish details of how they perform in terms of these indicators. The indicators are applied universally across the UK, so that it is possible to benchmark and evaluate the performance of one school, against another. The U.K. Audit Commission then publish the comparative data, together with a commentary. This allows government to establish "league tables" of schools.

21.   The U.K. Audit Commission have a series of criteria that govern the formulation of performance and which broadly conform to the structure outlined in PART 4 of this report.

United States

Summary of Funding Programmes

22.   The US Government sponsors a number of specific education funds similar to QEF. In addition, a range of National Foundations make regular contributions to the education sector. Like the QEF, many of these nationally funded grant programmes and foundations seek to stimulate innovation and excellence by supporting educational programmes that are outside normal public funding and to maintain a permanent fund to implement such programmes and activities although their specific focus may change over time.

Blue Ribbon Schools

23.   The Blue Ribbon Schools Programme was established in 1982 to recognise effective schools, which exemplify excellence in serving all students. For a school to be recognised there must be convincing evidence that school policies, programmes, and practices foster the development of sound character, a sense of self-worth, democratic values, ethical judgement, and self-discipline. Schools are entitled to retain their Blue Ribbon Status for a period of three years.

Technology Literacy Challenge Fund

24.   The Technology Literacy Challenge Fund (TLCF) is a formula grant programme that provides funds to States and Districts to invest in educational technology and to integrate educational technology into the classroom. The key objective of the TCLF is to "assist school systems that have the highest percentages of children in poverty and demonstrate the greatest need for technology".

25.   To become recipients, States must meet several requirements including the identification of long term strategies (i.e. plans for continuing the scheme once grant funding is exhausted) and other technical details to do with equipment purchase, promoting parent involvement, and establishing partnerships with the local community.

Measuring Performance

26.   The Government Performance and Results Act (GPRA) requires that all Departments are required to develop performance indicators. Annual reports are produced that summarise performance against each of the indicators.

27.   The US Department of Education is responsible for monitoring the effectiveness of the way in which educational funds are expended. Annual studies of the outcomes of all project expenditures are conducted. The studies use a series of tools to identify the performance of projects. These include:

(a)   *Survey work.* Teachers, students and parents are typically surveyed to identify the benefits that have arisen from a particular project;

(b)   *Selective case studies* of a proportion of grant recipients; and

(c)   *Data analysis.* Indicators which readily lend themselves to quantitative analysis are monitored (such as the number of students per instructional computer before and after the project). These rely on the collection of accurate baseline data before the project commences.

**A comparison of QEF's performance measures
against the six criteria of a good performance measurement system**

Introduction

1.   Most accepted methods of assessing value for money have a set of core principles that govern the way in which the problem should be approached. These principles are associated with most leading public sector performance measurement tools. They comprise three key criteria — whether the measures are **relevant**, **bounded**, and **comprehensive**, and three technical criteria — whether the measures are **valid**, **reliable** and **consistent**. These concepts are explained in the following paragraphs of this Appendix.

Relevant

2.   The information provided by a performance measurement system must be relevant to the purposes of the target audiences, within appropriate time scales and in a form which they can easily understand. This will normally require that there are clear links with the stated aims and objectives of the organisation, and that performance outside of the control, influence or legitimate interests of the audiences will be excluded.

3.   The evaluation measures reported by the QEF predominantly reflect an input-based approach to assessment (e.g. how many participants took part in the project?). To a large extent, this reflects the difficulties in assessing the nature of benefits that often arise from QEF projects (e.g. benefits from financing of programmes aimed at youth development). However, Audit's review of practice of advanced countries has identified a number of output and outcome-based indicators that could be used by the QEF to better capture the benefits arising from projects. **In this regard, the relevance of QEF performance measures to project outputs and outcomes could be improved by redefining existing performance indicators to measure quantifiable project outputs and outcomes (e.g. at the end of the project, were the recipients satisfied with the results?).**

4.   Maintaining a close relationship between performance measures and the objectives of the QEF is also a problematic issue. This is because the objectives of the QEF are broad and wide-ranging. In the course of this review, Audit examined a sample of 45 QEF application/monitoring files and 12 evaluation files. (It should be appreciated that since the QEF itself is a relatively new funding initiative, few of the projects for which funding has been granted have been completed. Hence, only a small number of evaluation files were available for review.) In summary, Audit observations from this review of the relevance of QEF performance measures are that:

(a)   in practice, some evaluations do not refer back to the stated objectives and outputs and outcomes of the project (i.e. the original objectives of the project that were accepted by the QEF at the application stage do not always seem to be assessed in subsequent evaluations); and

(b)   because the strategic objectives of the QEF are interpreted in such a broad fashion, the outputs and outcomes from almost all projects are considered to be consistent with the original objectives of the project, and more broadly, of the QEF.

Bounded

5.   The information provided must centre around a small number of the most significant and key performance indicators, or else there may be too much information to absorb or act on.

6.   The QEF finances a diverse range of educational projects. Their evaluation framework has been established to monitor progress against functional activities which result in a number of intermediate measures. This offers an opportunity to refine the evaluation process so that it focuses on the most significant factors (in terms of promoting the objectives of the projects, and the objectives of the QEF) and concentrates on a smaller number of key indicators. **The types of performance measures that could be adopted should lend themselves to quantification wherever possible.** An example would be to focus on the recipients' views of the actual benefits delivered by the project.

Comprehensive

7.   Within the boundaries adopted, all main services or aspects of performance must be covered not necessarily individually, but as part of the indices, aggregated statistics or reports produced. A suitable balance should be struck between economy, efficiency and effectiveness aspects of performance, including quality of service.

8.   The evaluation measures used by the QEF mostly address project inputs. For example, the number of project participants and the number of publications generated in the course of a project are particularly scrutinised in the evaluation process, as are equipment purchases (e.g. computers, servers). However, input-based indicators of this nature do need to be combined with a more output and outcome-based assessment of project benefits. **It is, after all, the outcomes of a project that determine whether value for money has been achieved, and what effects the project has made on education quality.** Output and outcome-based indicators should include surveying recipients of project outputs and outcomes to identify whether the project has been useful, or ensuring that the targets suggested in the funding applications are actually delivered by the end of the project.

Valid and reliable

9.   The indicators and measures advanced must represent the aspect of performance that they claim to indicate or measure. This is particularly important where groups of indicators are used, or where proxies are employed. Where the environment is changing rapidly, the indicators may have to be changed to reflect new circumstances.

10.   The information must also be sufficiently accurate and dependable for the purposes envisaged.   Measurement should not be too complex and must be capable of being audited independently.

11.   The QEF monitoring and evaluation files are not subject to independent validation.   In this review, Audit examined a sample of files (45 QEF application/monitoring files and 12 evaluation files) and compared expected project out-turns (as anticipated at the application stage when funding was approved) against the out-turn information reported in the QEF monitoring/evaluation files.   Based on the results of the examination, Audit noted that very few projects appeared to be evaluated in terms of comparing the outputs that were predicted by the applicant at the time the project was approved for QEF funding, against the outputs that were actually delivered by the end of the project.   **Whilst the QEF evaluation framework includes measures to determine the relationship between planned objectives and actual deliverables, indications are that monitoring/evaluation exercises conducted with reference to the original objectives of the project were sometimes lacking.**

Consistency

12.   Definitions of indicators should be consistent over time, and between units or bodies of indicators.   This is necessary to ensure the comparison of like-with-like, and prevent the creation or suppression of indicators according to the stories they tell.

13.   Audit examination of the sample of QEF monitoring/evaluation files has suggested that the evaluation framework (i.e. the evaluation criteria) itself has been used consistently.   **However, the criteria used to assess whether an application should receive the QEF funding in the first instance (e.g. whether the project is innovative) do not appear to have been used to evaluate the progress or outcome of a successful project (e.g. whether the project really delivered the intended innovative results).**   Consequently, it is hard to monitor consistency between the expected out-turns with the actual out-turns of a project.

Award criteria for the four domains of OSA

Domain One: Management and Organisation

1.1   Planning;

1.2   Staff collaboration and development;

1.3   Deployment of resources in implementation; and

1.4   Evaluation and feedback mechanism.

Domain Two: Teaching and Learning

2.1   Curriculum;

2.2   Class teaching and learning; and

2.3   Assessment.

Domain Three: Support for Students and School Ethos

3.1   Pastoral care;

3.2   Personal, social and cultural development;

3.3   Support for students with different educational needs;

3.4   Links with parents and community; and

3.5   School climate.

Domain Four: Students' Attainment (see Appendix I for details)

4.1   Moral and ethical development;

4.2   Intellectual development;

4.3   Physical and emotional development;

4.4   Social development; and

4.5   Aesthetic development.

Source: QEF's records

Detailed OSA award criteria for Domain Four: Students' Attainment

1.   School's contribution to students' attainment will be assessed in terms of the extent to which a school achieves its pre-set goals and targets in student development, including value-added improvements, having regards to the aims of school education. In this connection, the school's ability in setting attainable goals based on its own unique conditions; the mechanism used to achieve these goals; and the effectiveness of monitoring and providing feedback will also be considered.

2.   Whilst individual schools will be assessed against its own specific targets on student development, the following attributes of student attainment may serve as guidelines to schools in the longer term pursuit of all-round student development.

3.   **Moral and ethical development:** Good personal conduct: discipline and behaviour, appreciation of traditional moral values, awareness of social, political and civic duties; actively providing services to school and community; having high self-esteem, positive self-concept and strength of character to resist various temptations of the society.

4.   **Intellectual development:** Academic attainment: logical and independent thinking, inquiring and reasoning skills, and mastery of knowledge; language development: appropriate level of bi-literate and trilingual skills; life-long learning skills: ability and motivation in applying skills in technology, and setting attainable goals for continuous learning.

5.   **Physical and emotional development:** Positive health awareness; active participation in and organisation of sports activities; positive disposition to engage in life-long physical activities; students' readiness for the physical, emotional and mental transition to adulthood.

6.   **Social development:** Peer relationship: ability to cooperate, work in teams and share responsibilities; leadership and organisation skills; skills for interpersonal relationship: good communication skills, respect for and acceptance of other people, appreciation of our own cultural heritage and other cultures.

7.   **Aesthetic development:** Active participation in intra or inter school arts or cultural activities; creative abilities in the arts, music, drama and dance.

Source: QEF's records

Acronyms and abbreviations

EC   Education Commission

ECR7   Education Commission Report No. 7

ED   Education Department

EMB   Education and Manpower Bureau

IT   Information Technology

ITCs   Information Technology Coordinators

OSA   Outstanding Schools Award

QEF   Quality Education Fund

UGC   University Grants Committee