

هيئة تقنية المعلومات
سلطنة عمان



Sultanate of Oman
Ministry of Education

Brief Report

Survey of Indicators of Information And Communication Technology in Education Sector (Grades 1-12)


January 2011





His Majesty Sultan Qaboos Bin Said





Brief Report

Survey of Indicators of Information And Communication Technology in Education Sector (Grades 1-12)

Supervision:

- Ministry of Education.
- Ministry of National Economy.
- Information Technology Authority.

Objectives:

- Investigate the availability and utilization of modern technology in general education in all schools of Sultanate of Oman.
- Establish basic database of information on modern technology in general education in the Sultanate of Oman.
- Prepare reports to assist in decision making, planning and formulating programs to build national capabilities.
- Provide private and government institutions, as well as international organizations, with true indicators that reflect the real picture of modern technology in general education in the Sultanate of Oman.

Focus group of study:

The population has covered three categories:

- All government, private, international schools and Islamic institutes, and College of Technology of the Royal Guard of Oman.
- All teaching, administrative and technical staff in all educational regions in Sultanate of Oman.
- All grade 1-12 students in all educational regions. Questionnaires targeting students of grade 1-7 were filled by teachers of these grades in the presence of their students, while grade 8-12

students responded to the items of the questionnaires by themselves.

Table (1) below shows that a high percentage of Population of the study has responded to the items of the questionnaires. This is due to the availability of technology such as educational portal which helped in covering the focus group of the study .

Table (1)
Population of the survey and number of respondents

Type of schools	Category	Population	Respondents
Government schools	schools	1040	1040
	Teaching and administrative staff	53000	49273
	Students (grade 1-12)	525285	505633
Private schools	schools	220	181
	Teaching and administrative staff	5507	2512
	Students (grade 1-12)	34075	30369
International schools	schools	35	27
	Teaching and administrative staff	1853	1449
	Students (grade 1-12)	43347	29872
Islamic Institutes	schools	4	4
	Teaching and administrative staff	83	71
	Students (grade 1-12)	570	570
College Of Technology Of Royal Guard Of Oman	schools	1	1
	Teaching and administrations staff	62	62
	Students (grade 1-12)	132	132

Data Collection:

The following steps were followed to collect the data:

1. The questionnaires were uploaded in the educational portal in order to be responded to online.
2. The questionnaires were made accessible online to all schools.
3. Monitoring flow of data and work.
4. Access to questionnaires was stopped when time assigned to each questionnaire was over.
5. Collecting information in the main database in MOE and then transformed into files of electronic databases (Excel) and sent to the consultants.

Methodology of data analysis:

SPSS and Excel program were applied to analyse and formulate indicators. Generally, the following formula was used:

$$\text{Indicator} = 100 \times \frac{\text{no of schools / teaching and administration staff / students}}{\text{total no of schools / teaching and administration staff / students}}$$

Challenges:

The project was met by some challenges which are summarized as follows:

1. Fast flow of internet service (ADSL) is not available at far and distant regions. This challenge was handled and solved by using internet facilities available at schools in the near vicinity in all educational regions. Other schools that did not have internet were supplied by wireless modems and feeding cards in all educational regions.
2. Uploading large files causes slowness of the network. This was solved by sending software (discs) to the department supervising the running the educational portal.

3. The limited number of computers in general education schools since computer laboratories or learning centers are not available in these schools. This problem was solved by providing these schools with laptops.
4. Completion of information of private schools and international schools in the educational portal in order to respond to the items of questionnaire which requires access to the system and school code. A plan has been set to complete these information as well as conducting orientation and training meetings so that everyone could respond to the questionnaire.
5. Implementation of the survey in international schools which are different from government and private schools since they have special characteristics. To enable these schools to participate in the questionnaire, a special website was designed in English language. Orientation and training meetings were organized and technical assistant was provided to these schools.

Outcomes:

The survey has resulted in several indicators for government schools such as:

- 98.6% of schools use radio for educational purposes.
- 68.9% of schools use TV for educational purposes.
- Student/computer ratio was 11.8.
- 41.3% of computers available at schools are used for educational purposes.
- Percentage of students who use computers and internet in schools are 88.7% and 19.1% respectively.
- All schools (100%) have access to the educational portal.
- 99.9% have access to school management program.
- 89.2% of the schools have educational resource centers.



- 
- 84.5% of the schools have internet circuit.
 - 86.7% have access to internet.
 - 68.8% have computer laboratories.
 - 82.5% of the schools have land line phones.
 - 89.1% of teaching and administrative staff use internet.
 - 99.9% of teaching and administrative staff have mobile phones.
 - 91% of the schools organize in-service training workshops.
- 

Table (2)
Comparison between government and private schools
in basic international indicators:

Indicator		Government Schools	Private Schools
ED1	Percentage of schools that have radio used for educational purposes.	98.6%	33.1%
ED2	Percentage of schools that have TV for educational purposes.	68.9%	33.1%
ED3	Percentage of schools that have private communication network (i.e. fixed phone line)	94.2%	96.7%
ED4	Student/computer ratio where computer is used for educational purposes.	11.8	12.1
ED5	Percentage of schools that have access to internet, with respect to type of access.	86.7%	87.8%
	1. ISDL	3.4%	3.8%
	2. DSL	54.6%	42.1%
	3. Cable Modem	11.9%	14.5%
	4. Mobile Broadband	25.6%	24.5%
	5. Other	4.5%	15.1%
ED6	Percentage of students who have access to internet at the schools.	19.1%	27.2%
ED7	Percentage of teachers who are trained or qualified in IT.	15.1%	20.5%

Fig.(1)
percentage of schools that have radio
used for educational purposes

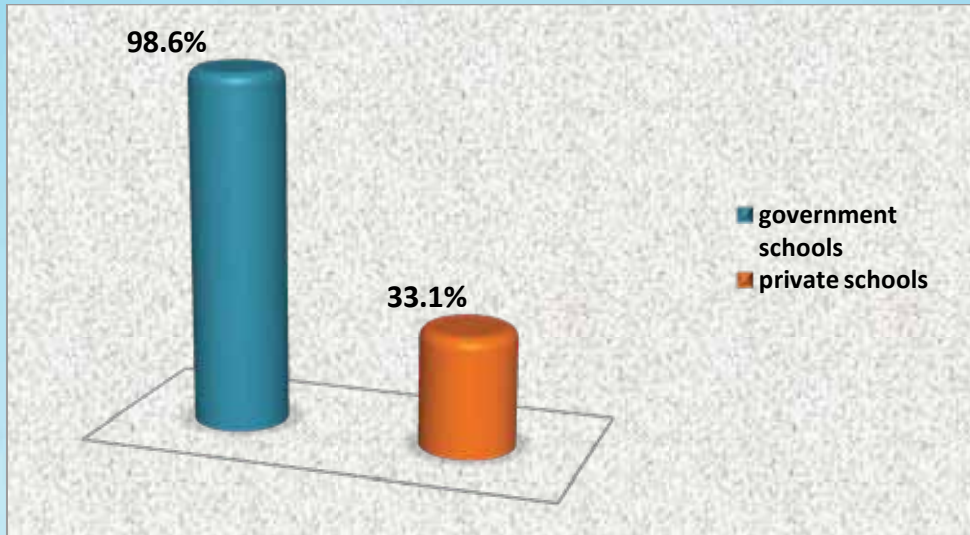


Fig.(2)
Percentage of schools that have TV for
educational purposes

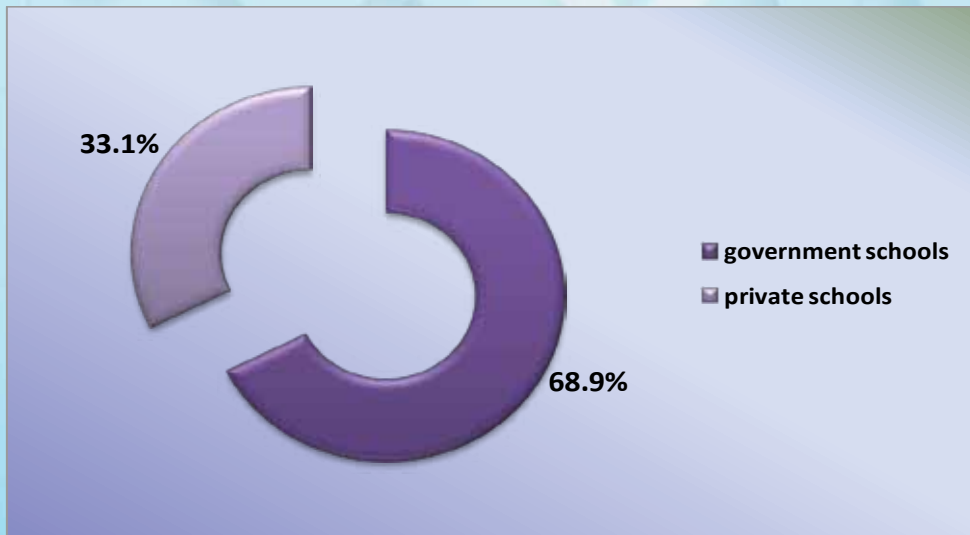


Fig.(3)
**Percentage of schools that have private connection
of communication net (i.e. land line phone)**

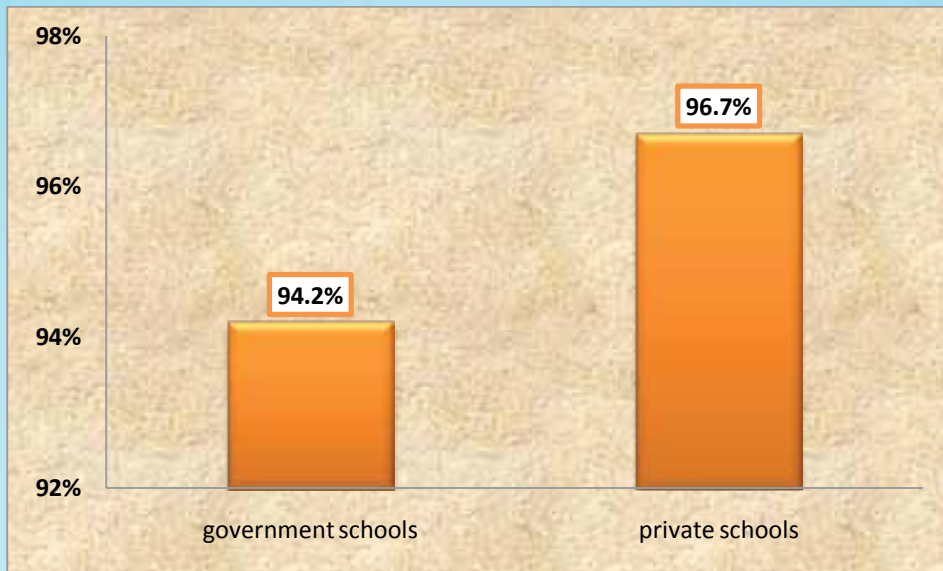


Fig.(4)
**Student/computer ratio where computer
is used for educational purposes**

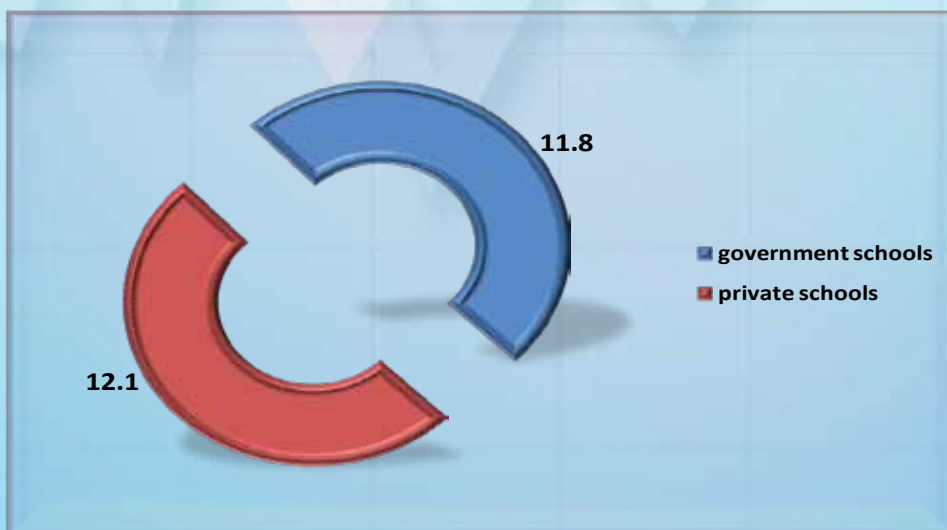


Fig.(5)
Percentage of schools that have access to internet, with respect to type of access

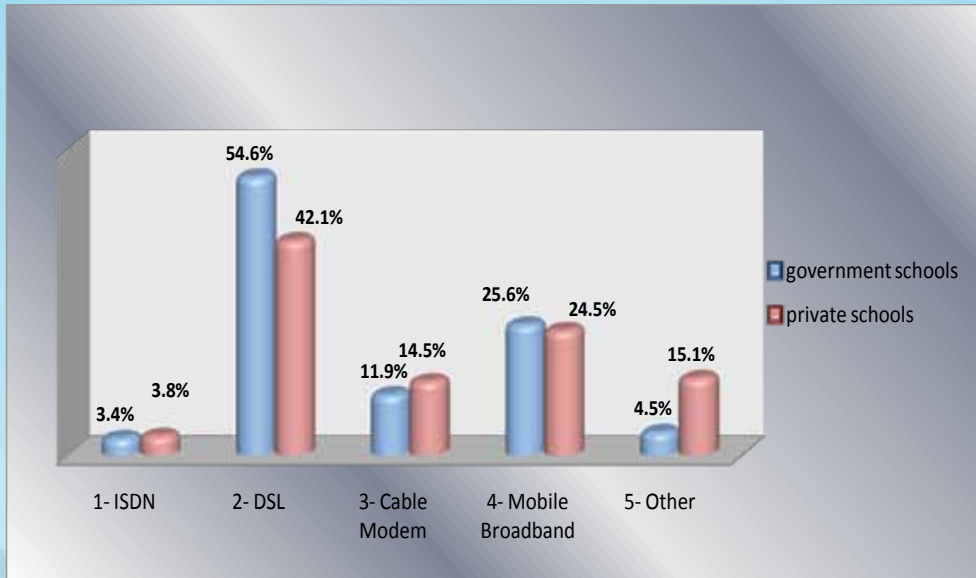


Fig.(6)
Percentage of students who have access to internet at the schools

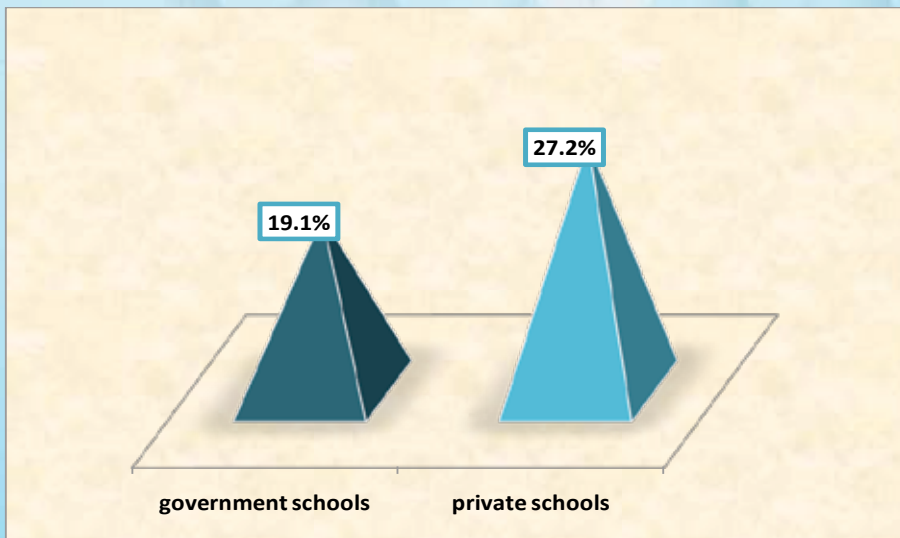


Fig.(7)
Percentage of teachers who are
trained/qualified in IT

