

**For Discussion
on 12 June 2000**

Legislative Council on Welfare Service

Assistance Provided to the Blind or Visually Impaired Persons in Processing and Accessing Information on Computers

Purpose

This paper informs Members of assistance provided to facilitate people with disabilities in processing and accessing information on computers.

Background

2. Government policy is to enhance and promote the development, understanding and use of information technology (IT) to all interested residents including the disabled. For people with disabilities including the visually impaired, the Administration has actively promoted the use of computer and information technology to facilitate their integration in the community and to improve their quality of life. Last year, there were complaints from the visually impaired about difficulties in accessing Government homepages on the Internet. The Administration responded promptly by undertaking to add a text-only-version of its homepages to facilitate access by the visually impaired. Homepages in respect of about ten Bureaux and Departments have been modified in the pilot scheme and the rest will follow suit shortly.

3. As Members may be interested to know about computer facilities provided for people with disabilities as well as the visually impaired, this paper also covers assistance rendered to people with disabilities in general.

Formal Education and Training

4. Education and training are essential to students with visual impairments in acquiring computer knowledge which will help develop their communication skills. At present, there are 62 special schools for students aged 4 to 15 with disabilities. The educational levels of these special schools range from preparatory class to Secondary Three and some to Secondary Five.

Computer-assisted learning is adopted for students where necessary and subjects provided in the special schools include computer studies, computer literacy and computers as communication aids. The two special schools for visually impaired children, namely Ebenezer School and Ebenezer Training Centre, are provided with computers, software and suitable learning materials. Support services including provision of special equipment and remedial teaching are also provided for those visually impaired children who choose to study in ordinary classes in primary and secondary schools. At present, the number of places for the visually impaired in the special schools and special education class in ordinary schools is 225 and 120 respectively.

5. Skills Centres operated by the Vocational Training Council and two non-governmental organisations (NGOs) also provide tailor-made full-time and part-time training on IT skills for people with disabilities aged 15 or above. These skills centres develop new courses and revise existing training course content and programmes to meet the changing needs of the employment market. The number of trainees in skills centres currently pursuing IT related subjects in recent years are as follows –

	No. Attended		
	1997/98	1998/99	1999/2000
Full-time	250	284	400
Part-time	133	118	160

6. A separate admission system for students with disabilities has been launched since 1997 under the Joint University Programmes Admission Scheme (JUPAS). Through this system, 35 students with disabilities have been admitted to local universities over the past three years. Learning aids, computers and other equipment are available upon application to facilitate their studies.

IT Facilities Available for People with Disabilities

7. The Administration has launched a \$4 million project to install computers in community halls/centres operated by the Home Affairs Department for use by all members of the public including people with disabilities. Separately, computers with power Braille, screen enlargers and voice synthesisers are being installed in the offices of some NGOs such as the Hong Kong Society for the Blind (10), Hong Kong Blind Union (6), and the

Hong Kong Retinitis Pigmentosa Society (2) and Ebenezer School and Home for the Visually Impaired (10) for use by the visually impaired who cannot use the public computers in community halls and centres.

8. The design of the new Hong Kong Central Library will take into account the needs of the visually impaired to access computer and Internet facilities.

9. Under the sponsorship of Hong Kong Jockey Club Charities Trust, the Hong Kong Polytechnic University, in collaboration with the Hong Kong Society for the Blind, has developed the first general-purpose Chinese computer interface for the visually impaired, i.e. the Access with Speech and Braille for Chinese Windows 98. In addition, the Hong Kong Blind Union and the Beijing Qing Hua University have developed a programme to assist visually impaired persons in using word-processing programmes in Windows systems through voice output.

10. For those who cannot access computers facilities because of mobility problems, the Jockey Club Rehabilitation Engineering Clinic in the Polytechnic University can provide special assistive devices such as programmable scanning keyboards or mouse emulators to suit the special needs of users. The Technical Aids and Resource Centre of the Vocational Training Council also designs and produces special aids and learning resources to assist disabled trainees pursue vocational learning.

11. The Association of Engineering and Medical Volunteer Services also runs a Rehabilitation Software Library. The computer software and hardware in the library serves as reference material for rehabilitation workers to plan education and training programmes. The Association also designs, modifies and produces adaptive devices for the disabled to use computers.

Funding Resources for Provision of Computer Facilities and Training

12. There are a number of funds available for the development of computer programmes, organisation of short computer courses or acquisition of equipment. Examples include –

Controlling Authority	Title of Funding	Amount Granted (\$M)			Remarks
		1998	1999	2000 (as at May)	
SHA	Chinese Permanent Cemeteries Charity Donation	0.31	0.33	On progress	-
DSW	Lotteries Fund	-	9.4	-	Granted to 50 NGOs operating 300 rehabilitation service units to purchase computers and software to meet training needs of service users
DSW	A special fund for purchase of personal computer for employment or self employment purposes.	0.24	0.07	0.22	44 applications amounting to \$0.65M have been approved since 1997.
SHW	S K Yee Fund for the Disabled	0.33	0.40	0.20	-
SHW	Queen Elizabeth Foundation for the Mentally Handicapped	0.03	0.79	On progress	-
Controller, SFAA	Sir Edward Youde Memorial Fund	0.33	0.27	On progress	For disabled students to purchase learning aids to pursue post-secondary and tertiary studies.
SEM	Quality Education Fund	4.26	1.21	9.16	-
Total:		5.5	12.47	9.58	\$27.55M

13. In addition, the Education Department has centrally co-ordinated the upgrading of all existing computers before commencement of the 1999/2000 school year. To provide greater flexibility to schools to procure the IT equipment which meet their needs and to speed up procurement procedures, the Education Department has allocated cash grants of \$695,000 and \$556,000 to the Ebenezer School and the Ebenezer Training Centre respectively for the purchase of additional computers and networks. Other special schools may also apply to Education Department if they need additional funds.

14. Of all the Quality Education Fund approved so far, three grants totalling \$1.87 million have been approved in support of projects on IT in Education for the visually impaired. Details of these projects are set out at Annex.

Way Forward

15. The Administration will continue to closely monitor the special needs of people with disabilities in order to facilitate their access to computers and enhancement of IT skills. To this end, the Sub-committee on Access, Recreation and Transport (SCART) of the Rehabilitation Advisory Committee provides a forum and opportunities for exchanging ideas and experiences on progress and obstacles encountered in pursuing IT accessibility. We will also keep up the momentum of public education to promote awareness and understanding of IT accessibility by the disabled and encourage IT service providers to incorporate the special needs of the disabled into their development strategies. In so doing, we hope to alert the community that people with disabilities are able to participate fully as members of society.

Health and Welfare Bureau
June 2000

Quality Education Fund

Projects on IT in Education for the Visually Impaired

Organisation	Project	Period	Grant Approved
Lingnan University	<p><u>Internet Surfing for Blind Students</u> This project aims to design innovative Human Computer Interface (HCI) methods; develop a prototype computer system with the new HCI methods for the blind; research into effective ways of implementing new software for web surfing for the blind; and evaluate the computer systems in schools for the blind in Hong Kong.</p>	June 1999 – August 2000	\$500,000
ELCHK Lutheran Secondary School	<p><u>School-based Computer Aid Learning Program for Blind and Visually Impaired Students</u> This project aims to design a computer learning and application curriculum for the visually impaired students admitted into the school under the Integrated Education project to enhance their learning abilities through the use of computer.</p>	March 2000 – June 2003	\$188,900
Ebenezer School and Home for the Visually Impaired	<p><u>Special Multi-Media Learning Centre for the Visually Impaired Students</u> This project aims to set up a special multi-media learning centre with special equipment to enable visually impaired students in the School to learn as well as to apply information technology. Rehabilitation training would also be provided to these students with the help of such equipment.</p>	Sept. 2000 – August 2002	\$1,178,000