

For information on
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**Legislative Council Panel on Education
Subcommittee on Integrated Education**

Services for Students with Hearing Impairment

Purpose

This paper briefs Members on the identification and support services provided by the Government for students with hearing impairment (HI).

Background

2. The auditory system is an important sensory system. A person is considered as having a certain degree of HI if he/she can only hear sounds of a relatively high intensity (over 25 decibel (dB) in general). HI can be caused by congenital or acquired factors such as diseases, trauma or medication etc. In terms of severity, HI can be divided into five degrees: mild, moderate, moderately-severe, severe and profound¹. Regardless of severity, HI might affect children's speech and language development, communication, learning and psycho-social ability.

3. In general, with the aid of amplification devices, the speech reception abilities of children with HI are enhanced and they can communicate with people orally. As a result, the majority of HI children choose to study in ordinary schools. Teachers in ordinary schools having admitted students with HI will, having regard to the abilities of the students and their learning and communication needs, adopt appropriate teaching and communication strategies, including using visual strategies, contextual cues, body language, text, gestures etc., to enhance the comprehension and learning effectiveness of HI students.

4. According to records of the Education Bureau (EDB), the numbers of students with HI attending public sector ordinary primary and secondary schools in the 2012/13 school year are 270 and 420 respectively². As regards the tertiary education level, figures are compiled based on the information provided voluntarily by individual students pursuing

¹ The five degrees of HI are: mild (hearing threshold 26-40 dBHL), moderate (hearing threshold 41-55 dBHL), moderately-severe (hearing threshold 56-70 dBHL), severe (hearing threshold 71-90 dBHL) and profound (hearing threshold greater than 90dBHL).

² The figures refer to those students who wear hearing aid and whose major SEN type is HI.

full-time sub-degree and undergraduate programmes. For the 2012/13 academic year, there are 56 students with HI³.

Identification and Assessment Mechanism

5. The Hospital Authority (HA) and the Department of Health (DH) provide hearing screening programmes for children of different age groups and with different needs through an array of hearing assessment services. Among the programmes are a territory-wide neonatal hearing screening programme launched by the HA in 2007, otoacoustic emission (OAE) test for newborn babies and the developmental surveillance for children aged five or below under the 'Integrated Child Health and Development Programme' offered by the Maternal and Child Health Centres (MCHCs) as well as hearing screening for primary one and secondary two students conducted under the Student Health Service. Moreover, hearing assessment services are also offered by the Ear, Nose & Throat (ENT) clinics of the HA, the Child Assessment Service (CAS) and the Student Health Service for early identification and referral of children suspected to have HI to relevant specialists for follow-up.

Support Services

Medical Services

6. The Child Assessment Centre (CAC) of DH provides interim support services for parents, such as talks, workshops and parental training courses, to help them understand their children's conditions so that better care and early intervention can be given accordingly. For confirmed cases, the CAC will make referral according to the needs and the family situations of the children in need to the ENT Specialist for further diagnosis and treatment. Subject to the consent of parents, the CAC of DH will refer the children concerned to waitlist for the pre-school rehabilitation services subvented by the Social Welfare Department (SWD) and will deliver the report to the EDB for hearing aid fitting and follow-up services.

7. The HA has a professional team comprising medical specialists, audiologists, speech therapists and nursing staff etc. to provide screening, diagnosis, treatment and rehabilitation services for children with HI. Its Audiology Centre provides patients of different age groups with audiological services, including hearing assessments and

³ Excluding students pursuing non-University Grants Committee funded sub-degree/degree programmes.

counselling. Its Speech Therapy Department provides speech therapy service for pre-schoolers with HI where necessary.

8. For children confirmed with profound HI, the HA will assess whether cochlear implants will improve their hearing ability. If a cochlear implant surgery is found to be an appropriate option, the HA will first provide counseling for the parents, including the risks involved in the implant surgery and the management issues of the cochlear implant etc. Subject to the consent of the parents, the HA will arrange the cochlear implant surgery for the children concerned. Matters relating to the arrangement of cochlear implant are detailed in paragraphs 11 to 14 below.

Rehabilitation Services

9. The SWD provides children with disabilities from birth to six years old, including those children with HI, with early intervention through its pre-school rehabilitation services, with a view to enhancing their physical, psychological and social developments, thus improving their chances of studying in ordinary schools and participating in daily life activities, and helping their families meet their special needs. Among these pre-school rehabilitation services, there are special child care centres and early education and training centres especially for children with HI. For details, please visit the website of the SWD at http://www.swd.gov.hk/en/index/site_pubsvc/page_rehab/sub_listofserv/id_serpresch/.

10. The Government has been steadily increasing the provision of pre-school rehabilitation places. Over the past six years, the Government has allocated funding to provide about 1 500 additional places, representing an increase of nearly 30%. There are currently a total of 6 230 pre-school rehabilitation places (including 179 places for children with HI). The SWD anticipates that about 607 additional places will come on stream in 2013-14. Furthermore, the Community Care Fund launched an assistance programme on "Training Subsidy for Children who are on the Waiting List of Subvented Pre-school Rehabilitation Services" in December 2011, the purpose of which is to provide training subsidy at a maximum of \$2,500⁴ a month for pre-school children from low-income families who are in need of rehabilitation services, thereby enabling them to receive service from self-financing services operated by Non-Governmental Organizations (NGOs) to facilitate their learning and development. Moreover, the SWD, through its District Support Centres for Persons with Disabilities, provides one-stop support and training services for persons with disabilities (including children with disabilities) living in their

⁴ Starting from 1 May 2013, the maximum of the subsidy has been increased from \$2,500 to \$2,615.

respective geographical districts to facilitate their integration into the community, and provides training, educational courses, talks, workshops, etc. for their carers so as to enhance the carers' caring ability. In addition, the Parents/Relatives Resource Centre also organizes social and recreational activities for parents/carers of children with disabilities for experience sharing and mutual support.

Provision of Amplification Devices

Cochlear Implant

11. The HA has been performing cochlear implant surgeries for clinically eligible patients with HI since 1991. For children confirmed to be suffering from profound HI, the HA will assess whether a cochlear implant will further improve their hearing ability. If assessment results indicate feasibility and consents are obtained from the patients or their guardians, the HA will perform cochlear implant surgeries for them. Eligible persons, i.e. Hong Kong residents, will pay at public charges (currently at \$100, and patients have to pay the hospitalization charge according to the length of stay in the hospital).

12. The cochlear implant is made up of an implant and an external speech processor. Under normal circumstances, the implant can last for lifetime. The current supplier of cochlear implants of the HA provides a ten-year warranty for occasional malfunctioning of the implant. Within the warranty period, the supplier is responsible for its repair and maintenance. Since the implant has to be replaced together with the external speech processor, in case if the implant malfunctions after the expiry of the warranty period, the HA will provide the clinically eligible patients with a full set of cochlear implant at a public charge.

13. As for external speech processors, like other medical items of similar nature (e.g. prostheses), they are not covered by the standard fees and charges of the HA. The current supplier of external speech processors of the HA provides a three-year warranty. Upon the expiry of the warranty period, patients are responsible for the repair and maintenance. Starting from April 2013, the HA has added the replacement of external speech processors of cochlear implants to the non-drug subvented items of the Samaritan Fund (SF) to provide financial assistance to patients in need. The HA would review the eligibility criteria, approving procedures and subvented items of the SF regularly with a view to providing comprehensive support to patients in need.

14. From the social welfare aspect, financial assistances are available for children with HI for purchasing necessary equipment or appliances. Children with HI, who meet

the eligibility criteria for disability allowance under the SWD, could make use of the allowance to meet the extra expenses incurred by HI. As for families on Comprehensive Social Security Assistance (CSSA), if related medical proof recommending the purchase or repair of habilitation devices or medical items is obtained, CSSA recipients with disabilities may apply for special grant from the SWD to meet the related expenses. The SWD will consider the applications on a case by case basis. In addition, other trust funds, such as Brewin Trust Fund, Li Po Chun Charitable Trust Fund, Tang Shiu Kin & Ho Tim Charitable Fund and Kwan Fong Trust Fund for the Needy, provide financial assistance to persons with disabilities who are in financial hardship for purchasing the necessary equipment or appliances.

Hearing Aid

15. The HA and DH will refer pre-school children and school-aged students with persistent HI to the EDB for hearing aid fitting and follow-up services. EDB will arrange all students with HI (including those who do not need to wear hearing aids for the time being) to receive regular audiological reviews, and will provide free hearing aids to those children in need (including those children who do not opt for or not recommended for cochlear implant surgery).

16. Children in need of hearing aids will be referred to the outsourced service providers by the EDB for hearing aid fitting and follow-up services. Audiologists of the service providers provide audiological reviews and hearing aid fitting as well as repair and maintenance services of hearing aid and earmould. Two free hearing aids with regular replacements are provided to those bilateral HI children for binaural listening. The EDB also provides counselling to parents and audiological reports to schools to help the parents and schools understand better the needs of children, as well as provide them with appropriate support.

17. The EDB has established mechanisms in monitoring the audiological services provided by service providers. The measures, including close contact and regular meetings with the service providers, review case information, arrange on-site inspections to relevant service centres and perform random checks on hearing aids for compliance with specifications on performance and effectiveness etc., so as to ensure that students' needs are met and the quality and progress of the delivery of services are monitored and reviewed.

18. To ensure that hearing aids and related services meet the needs of students with HI, the EDB will continue to review the specifications of hearing aids and the demand for

related audiological services, taking into account the needs of students, advance in technology, literature research and views of consultants etc.

Education Services

19. The Disability Discrimination Ordinance came into force in 1996. The Code of Practice on Education (the Code) issued by the Equal Opportunities Commission also took effect in 2001. The Code provides schools and educators with practical guidelines and assists educational establishments in developing policies that prevent and eliminate disability discrimination. The Code stipulates that educational establishments should not discriminate against students with disabilities and have the obligation to provide reasonable accommodations for students with special educational needs (SEN), including adaptations to teaching, communication and assessment methods. Hence, the rights of students with SEN have been protected under the existing law in Hong Kong. In order to support ordinary schools in providing appropriate services to students with SEN (including students with HI), the EDB has been providing schools with additional resources, professional support and teacher training.

Additional Resources

20. The EDB has been providing schools with additional resources on top of the recurrent subvention for ordinary schools, including the Learning Support Grant, the Enhanced Speech Therapy Grant, the Integrated Education (IE) Programme, the Intensive Remedial Teaching Programme in Primary Schools and provision of additional teachers for schools with Territory Band Three and bottom 10% junior secondary students, the Top-up Fund for purchasing special furniture and equipment (such as the FM System) and carrying out minor conversion works for students with disabilities etc.

Professional Support

21. Specialists of the EDB visit schools regularly to provide professional advice on areas such as deployment of resources and subsidies, learning and teaching, emotional and social problems, effective teaching and support strategies, as well as parent-school communication and cooperation etc. Audiologists, speech therapists and educational psychologists will introduce related resources and recommend appropriate support strategies to teachers and parents in relation to listening environment, listening strategies, use of hearing aids, speech and language skills, social adjustment and learning for students with HI.

22. Should the learning and communication problems of students with HI in ordinary schools persist after school-based support, the EDB will refer the students for Enhanced Support Service for HI Students Attending Ordinary Schools (ESS) subject to the consent of the parents. Under the ESS commissioned by EDB, experienced resource teachers (RTs) from the school for children with HI will provide after-school support to students with HI. RTs will also pay school visits to provide support to the students and to share different teaching strategies with teachers in ordinary schools through case conferences, workshops, seminars and class observations so as to enhance the learning effectiveness of the students with HI and to facilitate their integration into ordinary schools.

23. The EDB has also developed various resource packages, information leaflets and guidelines for teachers and parents to support students with HI. Apart from distributing the information to schools and parent-teacher associations, we have also uploaded them onto the HKEdCity (<http://www.hkedcity.net/>) so that teachers and parents can make use of relevant strategies to help students overcome their difficulties. For instance, the resource package on Communication Enhancement Strategies for Students with HI provides various communication strategies to enhance the communication effectiveness of HI students; the Operation Guide on the Whole School Approach (WSA) to IE, Guide to Curriculum for HI Children, Understanding and Helping Children with SEN - A Guide to Teaching, and Special Arrangements for Internal Examinations for Students with SEN etc. enhance the knowledge and skills of teachers and parents in supporting students with HI.

Professional Development

24. Starting from the 2007/08 school year, the EDB has been providing serving teachers with structured training courses pitched at Basic, Advanced and Thematic levels (BAT Courses) on supporting students with SEN. The core and elective modules of the Advanced Courses cover all SEN types (including elective modules focusing on the learning and teaching of students with HI). In order to enhance the practical elements of the courses, part of the curriculum allows the participating teachers to choose an attachment to a special school and/or an ordinary school. We require schools having admitted students with HI to arrange teachers to attend the Thematic Courses on Educating students with HI or Educating students with HI and Speech and Language Impairment (SLI) launched in the 2010/11 school year.

25. Starting from the 2012/13 school year, the EDB has offered a new round of professional development courses for teachers. The elective module of the Advanced Courses and the Thematic Courses have been re-grouped into three categories, namely, (1) Cognition and Learning Needs; (2) Behavioral, Emotional and Social Development Needs;

and (3) Sensory, Communication and Physical Needs. The Thematic Courses on Sensory, Communication and Physical Needs cover the content of educating students with HI. As required by the EDB, each public sector ordinary school should have at least one teacher complete each of the three thematic courses. The EDB would inform individual schools the progress of their teachers' training to facilitate them in arranging their teachers to attend special education training in a systematic manner taking into account the needs of the students and their teachers' training plan. According to the EDB's records, up to the end of the 2011/12 school year, among all public sector ordinary schools, 99.3% primary schools and 80.3% secondary schools have 10% or more of their teachers received special education training. Some 80% public sector primary schools have 30% or above teachers having received special education training. Enhancing teachers' professional capacity in catering for students with SEN is our policy target. We will keep in view the progress in teacher training of schools with a view to further increasing the number of teachers with special education training.

26. Besides, the EDB organizes from time to time workshops, seminars, talks and experience sharing sessions for school heads, teachers, teaching assistants and professionals to enhance their awareness and understanding of students with different types of SEN. Since the 2011/12 school year, the EDB has arranged 11 seminars and workshops on support for students with HI, with some 600 participant times, thus enabling teaching staff to understand the difficulties and needs of students with HI, the strategies for enhancing the hearing ability of these students and the procurement procedures of the FM System. Renowned academics from local and abroad, including Professor Kathy Lee from the Department of Otorhinolaryngology, Head and Neck Surgery, Chinese University of Hong Kong (CUHK), Dr. Karen Anderson, an educational audiologist from the United States, and Dr. Connie Mayer, a scholar from Canada on literacy learning of HI students, were invited as guest speakers to share with primary, secondary and special school teachers the latest development in assessing the communication and learning abilities of students with HI, effective hearing support strategies and enhancement of literacy learning skills for students with HI, and to provide consultation to the EDB regarding support services for students with HI.

Special Examination Arrangements

27. Other than daily learning support, students with SEN need appropriate special examination arrangements (examination accommodations). The EDB published the information leaflet on "WSA's Assessment Principles and Strategies" in 2004 and the "Guidelines on Special Examination Arrangements for Students with SEN in Internal Assessment" in 2009, which set out the general principles and strategies on internal special assessment arrangements, including detailed special assessment arrangements for students

with HI. The information has been uploaded onto the EDB website. In addition, EDB officers organize talks and workshops for schools on a regular basis to assist schools to continue fine-tuning the policies and measures of their school-based special examination arrangement.

28. Regarding public examinations, the Hong Kong Examinations and Assessment Authority (HKEAA) makes special examination arrangements for candidates with SEN (including candidates with HI). For example, arranging special examination centres for students with HI and exempting listening assessment, oral assessment of language subjects and school-based assessment of English language etc. for those candidates with more severe HI. The HKEAA has set up a Committee on Special Needs Candidates, which comprises representatives from the EDB, the DH, special schools, secondary schools and tertiary institutions, Committee on Home-School Co-operation, the Division of Educational Psychology under the Hong Kong Psychological Society and the Hong Kong Occupational Therapy Association. The EDB has been maintaining close communication with the HKEAA to keep the special examination arrangements, including the formats, target groups, criteria and arrangements, under constant review and enhancement.

Home-School Co-operation

29. Communication and cooperation between parents and schools are essential for supporting students with SEN. To enhance parents' understanding of their roles, the EDB issued and uploaded onto its website the Parent Guide on WSA to IE in the 2008/09 school year. The Guide provides information on the procedures for identifying different types of SEN (including HI) and on various support strategies.

30. Besides, the EDB conducts workshops each year on a regular basis for parents of students with HI who will be admitted to P1 and S1. The purpose is to brief them on the availability of school-based support services for the students and means of communication with schools in order to help their children adapt to the learning environment in a new school. On their visits to schools, specialists from the EDB will meet parents of individual students to discuss the needs of their children, and help them understand their children's hearing, communication and learning problems. The specialists will also discuss with school personnel on formulating appropriate support measures for the students.

Cross-Department /Sector Collaboration

31. The EDB has been working closely with various organizations and departments, such as the HA, DH and SWD, to arrange necessary referrals, coordination and provision of

related information regarding the necessary support provided by various departments for children with HI, such as providing audiological assessment reports for the SWD for the approval of disability allowance.

32. In addition, the EDB has all along been collaborating with tertiary institutions in developing theory-driven and evidence-based teaching strategies and resources, assisting teachers in applying structured teaching modes and learning materials in enhancing the knowledge and skills in supporting students with HI. For instance, professional views are provided to the Department of Otorhinolaryngology, Head and Neck Surgery, CUHK in the development of assessment tools on speech perception of children with HI and *Intervention Efficacy for Children with Asymptomatic Bilateral Sensorineural Hearing Loss*.

Service Efficacy

33. The EDB encourages schools to adopt the WSA to IE which is in line with the global trend in the development of IE. On the implementation of the WSA to IE, schools are required to provide details about their IE policies, resources allocated for that purpose and support measures for students with SEN in their annual reports, school websites and/or school profiles. A sample report is available at the Operation Guide on the WSA to IE for schools [reference](#).

34. As observed by the EDB during regular school visits and on the basis of information collected from schools' year-end self-evaluation reports, schools in general have put in place mechanisms for planning, implementing and evaluating support services for students with SEN. As revealed in schools' self-evaluation reports, students with SEN have shown improvements in their social adjustment, learning performance and learning attitude. Home-school cooperation has also been reinforced, while an inclusive culture and the spirit of the WSA have gradually taken root in schools.

35. To understand the quality of the outsourced audiological services, the EDB invited parents to fill in *Service Questionnaire* after receiving the outsourced services. From September 2009 to March this year, the EDB received a total of about 900 service questionnaires. About 91% of the parents were *very satisfied* or *satisfied* with the services as a whole. The few services which were considered less satisfactory related mainly to the attitude of the service providers and insufficient provision of information. We have already followed up these with the service providers and demanded improvement of services.

36. In order to enhance the ESS, the EDB launched a two-year pilot "Additional Educational Support Services for HI Students in Ordinary Primary Schools" project (the pilot project) in the 2010/11 school year. The pilot project was completed in the 2011/12 school year and views from stakeholders (including teachers, parents and students with HI) were solicited. The findings indicated that stakeholders were very satisfied with the scope and mode of the service of the pilot project. The mode of support and resource requirements of the ESS was reviewed in the light of the findings. Starting from the 2012/13 school year, the EDB has allocated additional resources (including the provision of additional RTs, creation of a speech therapist post and increase in cash grant rate) to the school for children with HI to facilitate the school to adopt the enhanced mode of support in providing services which better meet the needs of the students.

37. Moreover, specialists from the EDB has been monitoring the provision of ESS through school visits, class observations, meetings, monitoring of students' attendance and learning progress etc. At the same time, the EDB continues to work in partnership with the schools for children with HI in further fine-tuning their school visit services and promoting collaboration between teachers of ordinary schools and RTs in order to help the students achieve better learning effectiveness.

Advice Sought

38. Members are invited to note the content of this paper.

Education Bureau
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