

Professional Practice Guidelines

Psycho-educational Assessment & Placement of Students with Special Educational Needs



Community
Psychology
Hub



Ministry of Education
SINGAPORE



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National Council
of Social Service



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Foreword

Since the first edition of the Professional Practice Guidelines (PPG) for the Psycho-educational Assessment and Placement of Students with Special Educational Needs was published in 2011, many professionals serving schools, students with special educational needs (SEN), and their parents have benefited from clear and consistent standards for professional practice. As practices, policies and research evolve and improve over time, so too must the PPG so that it remains relevant and practical to its intended users.

In the last six years, there have been notable changes in the local educational landscape for students with SEN, namely the inclusion of students with moderate to severe SEN in the Compulsory Education (CE) Act, enhanced provisions for SEN in national schools, and additional pathways for students in government-funded Special Education (SPED) schools.

In the area of diagnostic standards for disabilities, there have been new local clinical practice guidelines for Attention-Deficit Hyperactivity Disorder (published by the Ministry of Health and the Academy of Medicine Singapore in 2014), and the revisions to international guidelines on diagnosis of mental health disorders (e.g., Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition published in 2016). These changes have direct implications on the way Allied Health professionals make assessments and recommendations for students with SEN, and these in turn, impact the quality of advice that these professionals give to parents regarding their children's special educational needs.

The revised PPG reflects the consensus of professionals from the Ministry of Education, Department of Child Development (KK Women's and Children's Hospital), the Child Development Unit and Department of Paediatrics (National University Hospital), the Department of Child and Adolescent Psychiatry (Institute of Mental Health), National Council of Social Service, Community Psychology Hub and SPED schools. Inputs from resource persons from the universities and feedback from stakeholders have also helped to shape the revised PPG.

I wish to thank all those who have contributed in one way or another to the revision of the PPG. It is my hope that we will all continue to strive together to do our utmost for our children with SEN.

Mrs Lucy Toh
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Introduction

Scope of the Professional Practice Guidelines (PPG)

The PPG is focused on the psycho-educational assessment and educational placement of students with Special Educational Needs (SEN) aged 6 to 18. It does not include standards for assessment for therapy and social care.

Target Group

The PPG is intended for use by psychologists, medical and allied health professionals (e.g., occupational therapists, speech language therapists) who are involved in advising parents about the SEN and placement of students with disabilities.

Development of Professional Practice Guidelines (PPG)

The PPG is developed by a workgroup comprising professionals representing the various public agencies involved in the assessment of and provision of advice for students with SEN. These include specialists from Ministry of Education (MOE), Ministry of Health (MOH), and senior psychologists from Special Education (SPED) schools. Personnel from the National Council of Social Service (NCSS) and National Institute of Education (NIE) have also provided inputs on policy and contextual issues that may affect assessment and placement of students with SEN.

Technical sub-teams were formed within the workgroup to look into specific areas and to make recommendations based on research evidence and internationally-recognised best practices. These were then discussed with all workgroup members to agree on the recommendations that should be included in the PPG.

The development of the PPG is guided by the following principles:

- The PPG must be applicable to the local context. It must be aligned with current national educational policies as well as current provisions for SEN in Singapore.
- The PPG must be implementable by the majority of practitioners in the current local context.

To ensure that the PPG is applicable and implementable in the local context, the following actions were undertaken:

- Interviews were conducted with relevant personnel in all SPED schools to gather information about the schools' admission processes.

- The draft PPG was disseminated to relevant stakeholders and resource persons for their input and feedback.

Statement of Intent

The content of the PPG is based on information available at the time of its development, from January 2018 to July 2018. This information is subject to change as scientific knowledge advances, and the policies and provisions for SEN evolve.

The PPG is not intended to replace professional judgment. Practitioners should use the PPG to enhance professional practice standards. Adherence to the PPG should be balanced with the need to consider the best interests of the student.

Chapter 1: Definitions

1.1 Psycho-educational Assessment

Psycho-educational assessment is a systematic process of gathering relevant and valid information about a student's strengths and needs¹⁻⁴ and the student's interactions with the environment^{5,6} to understand learning and developmental concerns, and to assist with appropriate educational planning for the student, which includes placement, intervention, and accommodations^{7,8}.

It involves the implementation of a set of assessment procedures, selected to address a set of referral questions^{2,9}. The student's learning needs are the focus of a psycho-educational assessment. However, behavioural/emotional and medical issues would need to be taken into consideration in the assessment⁸.

The intent and findings of the psycho-educational assessment should be communicated to parents/caregivers, and where appropriate, to the student and those working with the student (e.g., teachers, therapists), in a language and manner that is accessible or understandable to them^{2,3,7}.

1.2 Special Educational Needs (SEN)

A student's SEN arises out of a complex interaction between his/her strengths and weaknesses, the level of support available in the environment, and the appropriateness of the education being provided^{5,6}.

A student is considered to have SEN when all of the criteria, a, b, and c, stated below have been fulfilled:

a) Has a disability^{10-13, a}

and

b) Displays:

- Greater difficulty in learning as compared to the majority of peers of the same age^{11,12,14}

Or

- Difficulty accessing educational facilities catered for the majority of peers of the same age^{11,15}

Or

- Some areas of impairment, in terms of social, academic, physical or sensory functioning (i.e. the student is not on par with the majority of the peers)¹².

and

- c) Requires different and/or additional resources beyond what is conventionally available^{12,16}

As a student's SEN are the result of interactions between the student and the environment, the type and level of needs may change over time and across different contexts^{5,6}.

1.3 Educational Placement

An educational placement is a setting in which educational services are delivered to the student¹⁷. For children in the school-going ages (7 to 18 years), there are currently two broad categories of educational placement in Singapore: mainstream schools^{18,b} and Special Education (SPED) schools¹⁹.

SPED schools offer a specialised curriculum to cater to the needs of students with different types of disability. In addition, some SPED schools offer both mainstream and specialised curriculum²⁰. There are currently 19 Government-funded SPED schools (<https://www.moe.gov.sg/education/special-education/special-education-schools/list-of-sped-schools>) run by 12 Voluntary Welfare Organisations (VWOs) (refer to the Appendix for a list of schools).

Guidelines on the assessment for appropriate educational placement are found in Chapter 3 (Assessment for Specific Purposes).

1.4 Compulsory Education

From 2019, all children with SEN born after 1st January 2012 will be included within the Compulsory Education (CE) framework (<https://www.moe.gov.sg/education/education-system/compulsory-education>). This means that these children must attend either a mainstream school (for those with mild SEN) or attend a Government-funded SPED school (for those with moderate to severe SEN), unless they are granted exemption from CE.

Guidelines on the application to Government-funded SPED schools and exemption from CE are found in Chapter 5 (Framework and Pathways for Educational Placement of Students with Special Educational Needs).

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Endnotes

- a. Disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations (World Health Organization. Retrieved July 5, 2010, from <http://www.who.int/topics/disabilities/en/>).
- b. Mainstream schools includes mainstream Government, Government-aided, Independent, Specialised Independent (School of the Arts, Singapore Sports School, NUS High School of Mathematics and Science, School of Science and Technology), and Specialised Schools (Northlight School, Assumption Pathway School, Crest and Spectra Secondary Schools).

Chapter 2: Psycho-educational Assessment Data

A comprehensive psycho-educational assessment will provide information about student-specific skills and areas of functioning (e.g., medical, developmental, learning/academic and social functioning^{1,2}), as well as environmental factors that impact the student's learning.

2.1 Sources of Assessment Data

Assessment data could be gathered from^{1,3}:

- formal records on the student (e.g., past psychological, educational, developmental, medical assessments);
- a range of assessment tools including:
 - formal testing to determine functioning levels (e.g., norm-referenced tests, criterion-referenced tests);
 - progress monitoring records of the students who are undergoing structured remediation or intervention (e.g., oral reading fluency scores from curriculum-based measures);
 - screeners/checklists (e.g., self-report ratings);
- interviews and direct observations to determine functioning levels;
- reports from teachers and other persons who work with the student in and outside of school (e.g., school counsellor, speech language therapist, social worker, medical professional, peers);
- reports from the primary caregiver, as well as other persons who are involved in the care of the student (e.g., parents, grandparents, domestic helper); and/or
- work samples completed by the student.

2.2 Areas of Assessment

To obtain a holistic understanding of a student, assessment approaches should make use of diverse assessment methods and gather information from multiple sources¹. Information may be gathered in the following areas of student-specific skills and areas of functioning considered necessary or important for the student's success at school⁵:

- cognitive skills⁵ (e.g., intellectual capacity, memory, attention, concentration skills);
- language skills (e.g., receptive and expressive language skills);
- academic skills² (e.g., literacy, numeracy);
- social, behavioural and interpersonal functioning³;

- adaptive behaviour³;
- health and body state factors¹, including motor and sensory difficulties, energy level; and/or
- strengths, motivation and interests¹.

Where appropriate, students' views on their own learning should be sought.

In addition to student-specific factors, assessments should also look into the learning environment of the student and its impact on the student's learning. This could cover the following¹:

- a) Instructional factors, such as curriculum (e.g., content, school-based testing methods); and pedagogy (e.g., pace of instruction, mode of instruction, use of assistive technology, use of augmentative communications).
- b) Interaction patterns between the student and peers (e.g., level of social acceptance, incidents of bullying), and between the student and teachers.
- c) Physical setting, such as physical and sensory environment (e.g., lighting, classroom displays, background noise, seating); and accessibility and safety issues (especially for students with orientation and mobility concerns).

2.3 User of Psycho-educational Assessment Tools and Data

Psycho-educational assessments should be conducted by persons who are competent in the psychological and educational assessments of students. Competence involves having the training, knowledge, skills and experience necessary to⁶:

- select and administer reliable and valid psycho-educational tests that are appropriate for the student and consistent with the purpose of the assessment;
- correctly interpret assessment results based on the understanding of developmental capabilities, milestones and characteristics of the student; and
- provide appropriate and acceptable accommodations where necessary (refer to Section 2.4.1b).

Users of psycho-educational tests should also fulfil the stipulations of test publishers on the minimum qualifications for test administration⁶. Based on the criteria defined by test publishers, the person conducting Level C tests⁶ (e.g., individually-administered tests of cognitive functioning, personality tests and projective methods) could be an **independent user** or a **supervised user** of the test.

An independent user is a registered psychologist with certification by the Singapore Psychological Society or by any of its recognised professional bodies.

A supervised user should only administer the test in the context of a planned supervisory relationship with an independent user of the test⁶.

2.4 Factors to Consider in Selecting and Using Different Psycho-educational Assessment Measures

2.4.1 Norm-referenced/Standardised Tests^{2,4,7}

a) Test Selection

Standardised tests selected to assess cognitive functioning and attainment must be valid and reliable.

Priority of selection should be given to assessment tools with the most current norms, which are applicable to the local population. Assessors should avoid using obsolete tests where more current editions are available. In the absence of appropriate norms, careful consideration should be made with regard to language and cultural factors. Assessors should be familiar with the instrument, including its limitations.

The test should be selected based on its ability to provide relevant information for decision-making. For the purpose of assessing cognitive functioning, tests that have been designed for group-based screening cannot be used to replace standardised individual tests.

b) Assessment

Standardised testing procedures should be adhered to. When necessary, users of standardised tests should abide by the accommodations that are allowed in the test manual (e.g., pacing and using breaks between subtests, using assistive devices).

Where modifications are made to standardised testing procedures (e.g., modifying the language of instructions, not timing a “speeded” test, extending the teaching items), the validity of inferences made from test scores may be compromised. In such cases, alternative tools or modes of assessment should be considered.

c) Scoring/Reporting

When scoring and reporting test results, the range or confidence interval should be reported alongside the standard score. When

accommodations or modifications are used, these must be recorded in test protocols and stated clearly when psychological reports are written.

When modifications made violate standardised testing procedures and compromise the validity of the assessment, standard scores should not be reported. Emphasis could be placed on the student's qualitative responses to the test items.

When any subtests are aborted during administration, or when computation of scores involves proration, clear justification must be recorded in test protocols and reported accordingly.

The interpretation of test scores can be complex, and great caution should be exercised in this area. The assessor must conduct a careful evaluation of the effects of various factors on test results (e.g., situational factors, age and socio-economic status of the student, motivation/fatigue, effects of language and/or cultural differences, impact of specific disabilities, use of accommodations^a). Detailed observations of testing behaviours and qualitative information on test performance should be reported.

2.4.2 School-based Tests

School-based tests include written, listening, oral and practical tests. Interpretation of school-based test results should be made with caution as school tests may vary in terms of their levels of difficulty. The differing levels of difficulty depend partially on the purpose of tests (e.g., identifying students of differential abilities or identifying base-line/entry level).

It should also be noted that there could be access arrangements^b provided (e.g., extra time, frequent breaks) which could affect a student's performance. Given variations in purpose and difficulty level, school-based tests cannot solely be used to reflect a student's abilities and attainments.

2.4.3 Direct Observations^{4,8-10}

Direct observations are the most common means to assess skills that cannot be tested (e.g., social skills).

Validity and reliability of data from observation is optimised when:

- behaviour is taken in context;
- the student's behaviour is seen across a range of settings and over a period of time; and/or

- structured observation protocols are used (e.g., Autism Diagnostic Observation Schedule).

The observation data collected should be interpreted in relation to what preceded and followed the session that could impact the student's behaviour during the session. Feedback from teachers or significant adults could be obtained to determine if these observations are consistent across other settings and situations.

2.4.4 Reports by Caregivers and Teachers^{9,11}

Reports by caregivers and teachers are important. When interpreting the reliability and validity of these reports, evidence of concurrence across different sources of information should be considered.

The use of structured administration protocols (e.g., Autism Diagnostic Interview-Revised, Vineland-III, Conners Continuous Performance Test-3, NICHQ Vanderbilt Assessment Scales) to obtain reports from caregivers and teachers is recommended. This would improve the accuracy and reliability of information obtained.

2.4.5 Self-Reports

Self-reports are an important means of obtaining the views of the student. Methods of eliciting self-report include structured protocols, questionnaires, open-ended interviews, projective techniques (e.g., kinetic family drawings) and reflection journals.

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Endnotes

- a. In instances where the standardisation sample differs from the population that the student is from, cautionary statements should be made in the report, e.g., “These results should be interpreted with caution inasmuch as the instruments were standardised on a sighted population, and certain accommodations were made for the student’s access to the visual materials.”
- b. Access arrangements may also be referred to as special arrangements. These arrangements allow candidates with substantial and long-term disabilities access to the examination and the opportunity to demonstrate their attainment. These could include, for example, an extra time allowance, the provision of specially adapted papers and assistance with reading or writing.

Cambridge Assessment International Education (2018). *Cambridge Handbook (International): Regulations and guidance for administering Cambridge exams*. Retrieved August 4, 2018, from <http://www.cambridgeinternational.org/images/418806-cambridge-handbook-2018-international-.pdf>

Chapter 3: Assessment for Specific Purposes

3.1 Assessment to Ascertain Appropriate Special Educational Placement

The educational placement of a student is determined through careful deliberation, after balancing the following considerations¹:

- the student's strengths and learning needs;
- the school's capacity in meeting the student's level of SEN i.e. the physical resources and expertise in the school; and
- the parents' choice.

Recommendations of appropriate educational placement should be made by qualified professionals with good knowledge of the student and available educational placement options.

Assessment results and recommendations for placement should be shared by the professionals with parents in a clear and appropriate manner, incorporating information on the availability and suitability of placement options. When guiding parents, due consideration should be given to their need for information, for support to understand and accept their child's SEN, and for time for decision making^{1,2}.

Where appropriate and feasible, the student's views about his/her long-term educational goals should be sought, and if needed, support extended to the child to facilitate his/her transition into the appropriate educational setting.

Decisions and recommendations regarding school placement or provision should be reviewed over time to ascertain the extent to which they meet the student's current needs³⁻⁷. It is important to review the student's needs before each major transition point (e.g., when the student transits from one setting or programme to another²).

In some cases, a review to consider a move or a change of placement may be needed, for example, where the student shows significant improvements that would enable the student to access a wider range of educational options, or develops more severe needs or challenging behaviours which require an increased intensity of support.

Challenging behaviours refer to those that are considered unacceptable by social standards. They are behaviours that have a significantly negative impact on the student's education and social interaction, and/or those that impact on the lives of others (e.g., behaviours that pose immediate harm to others and/or self, disruption of the learning environment)⁶.

In the assessment of challenging behaviours in students with SEN, the following considerations need to be made:

- A student's challenging behaviours should not be considered in isolation. They should be considered holistically to gain a full understanding of their possible causes and functions⁷. Some factors underlying challenging behaviours could include communication difficulties and psychiatric disorders⁶. Appropriate referrals to address these underlying factors should be recommended.
- Specific assessment considerations could include conducting the assessments over time and across different settings (e.g., the classroom, school canteen, playground, home). In addition, should the student's challenging behaviours interfere with standardised testing procedures, the assessor should discontinue the assessment and re-assess the student at a later time. If necessary, alternative test procedures and methods may need to be considered in the re-assessment.

3.2 Ascertaining Student's Suitability for Placement into a Mainstream School

A student is considered to be suitable for mainstream schools if all the following conditions are met:

- the student has the cognitive ability to access the mainstream curriculum;
- the student's needs can be met with minimal adaptation to the mainstream curriculum or learning environment, e.g., the student is able to use assistive devices independently or with minimal support (see Chapter 5, Table 2: *Description of SEN Categories – Mild SEN*);
- the student has the adaptive skills to cope with the mainstream learning environment (e.g., large group learning settings); and
- the student's SEN can be met without compromising the education and/or safety of other students².

3.3 Ascertaining Student's Suitability for Placement into an Appropriate Special Education (SPED) School

A student could be considered for placement into an appropriate SPED school when the student's SEN require any of the following:

- a specialised curriculum (e.g., functional academics, daily living or life skills for community living, vocational skills for work readiness and adaptive instruction including braille instruction);
- extensive redesign of or specially-designed instruction (e.g., extensive use of work schedules and visual schedules); and/or

- specific expertise and provisions to support the student's behavioural and/or adaptive functioning level (e.g., intensive therapy services, low student-teacher ratio).

3.4 Assessment for Access Arrangements and Curricular Exemption

The purpose of the access arrangements (also referred to as special arrangements)^a is to enable students with SEN to demonstrate skills, knowledge and understanding in an examination context. The access arrangements should minimise barriers to the normal assessment arising from students' SEN without compromising the standards being tested, so that candidates can receive recognition for their attainment. Access arrangements must not give the student an unfair advantage over other students⁸⁻¹¹.

Recommendations for access arrangements should not be based solely on the student's disability, but also take into account the student's specific needs¹². Not every student with a disability is eligible for access arrangements. For example, not all students with dyslexia require extra time during examinations. Also, not all students with a particular disability require the same type of access arrangements⁹; for example, not all students with ADHD require a prompter or examination in a separate room).

Recommendations for access arrangements should be accompanied by clear and current^b evidence of functional needs to demonstrate that the recommended arrangements would be appropriate¹² (e.g., assessment results that demonstrate impairments in the student's reading skills and writing speed could indicate that the student would benefit from additional time during examinations). Information about the student's current functional needs can be provided by schools, teachers or professionals who have worked directly with the students. A student's need for access arrangements is to be reviewed periodically.

In addition to the student's needs, it is also important to consider the student's familiarity with the specific arrangements (e.g., students who are not familiar with using a computer may not find this arrangement useful during examinations)^{8,12}.

Students who have difficulties coping with the standard Mother Tongue Language (MTL) curriculum can consider the option of offering MTL at a lower level. The Foundation MTL curriculum offered at Primary 5 and 6, and the MTL 'B' curriculum offered at Secondary and Junior College levels focuses on the development of oral and listening skills, with a much reduced demand on writing skills.

In the event that students with SEN are unable to demonstrate skills even when appropriate arrangements are provided, curricular exemption (e.g., exemption from offering Mother Tongue Language at the national

examinations) and/or exemption from a component in a subject area (e.g., oral examination, listening comprehension) can be recommended¹⁰.

Students with certified SEN may be considered for exemption from Mother Tongue Language (MTL) if their SEN severely affects their ability to cope with MTL and with overall learning. In evaluating such applications, MOE takes into account not just their diagnosed SEN but also how the students are coping across the different subjects in school, i.e. beyond MTL.

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Endnotes

- a. Access arrangements may also be referred to as special arrangements. These arrangements allow candidates with substantial and long-term disabilities access to the examination and the opportunity to demonstrate their attainment. These could include, for example, an extra time allowance, the provision of specially adapted papers and assistance with reading or writing.
- b. Cambridge Assessment International Education (2018). *Cambridge Handbook (International): Regulations and guidance for administering Cambridge exams* (Retrieved August 4, 2018, from <http://www.cambridgeinternational.org/images/418806-cambridge-handbook-2018-international-.pdf>). For the purposes of access arrangements, the evaluation of learning needs arising from the disability should be completed within three years prior to the date of the examination.

Chapter 4: Assessment Considerations for Specific Populations

While the general principles of assessment have been covered previously in Chapter 2 (Psycho-educational Assessment Data), the subsequent sections highlight assessment considerations for the specific populations below:

Students with:

- 4.1 Visual Impairment
- 4.2 Hearing Loss
- 4.3 Central Auditory Processing Disorder
- 4.4 Cerebral Palsy and other Significant Motor Impairments
- 4.5 Developmental Coordination Disorder
- 4.6 Attention Deficit Hyperactivity Disorder
- 4.7 Dyslexia
- 4.8 Language Disorder
- 4.9 Speech Sound Disorder
- 4.10 Stuttering
- 4.11 Social Communication Disorder
- 4.12 Autism Spectrum Disorder
- 4.13 Intellectual Disability
- 4.14 Multiple Disabilities

The above list represents commonly-occurring disabilities amongst students in Singapore. This list of disabilities is not intended to be exhaustive. The assessment considerations mentioned here need to be viewed alongside the general principles of assessment highlighted in Chapter 2 (Psycho-educational Assessment Data).

4.1 Assessment Considerations for Students with Visual Impairment

Visual Impairment (VI) refers to an impairment in vision that, even with best corrected vision, adversely affects a student's educational performance. The term includes both partial sight and blindness¹. Visual problems include visual field loss, visual fatigue and difficulties with figure-ground perception and visual efficiency^a. Any refractive error^d (e.g., myopia, hyperopia, astigmatism and presbyopia) should be corrected first before considering it an impairment¹⁰.

Assessors need to be aware of the enormous variability among students with VI and need to take into account such variability when planning an assessment^{2,3}. Hence, information on the cause and nature of the visual loss, severity and the specific effects of students' visual loss need to be taken into account for the assessment (e.g., blindness versus partial vision).

Assessors need to be aware that VI can result in difficulties in other domains (e.g., reading development). A significant number of students with VI will have co-morbid learning disabilities but caution should be exercised to avoid over-identification of additional disabilities in students with VI^{3,4}. It is important to ensure that adequate educational opportunities and training in disability-specific skills have been provided to students before a clear diagnosis of an additional learning disability is made⁵. It is therefore recommended that any assessment to determine the presence of learning disabilities in students with VI is conducted only after they have had at least two years of appropriate formal academic instruction (i.e. after Primary 2).

Assessors need to take note of response behaviours unique to students with VI²:

- "Passive", neutral facial expressions should not be taken to indicate that the students are not listening attentively.
- Students may display resistance to having their hands directed to unknown objects; and may use protective responses such as pulling their hands away. They may also display protective responses to unanticipated events.
- Students may display visual responses such as eccentric viewing, head tilt, holding objects close to them, and/or closing their eyes.
- Students may avert their gaze if objects are too close or if they want to disengage from a task.
- Students may be in a low arousal state due to a lack of visual stimulus and a low postural tone.
- Students may use "immature" patterns or repetitive patterns of object exploration such as repeated dropping for auditory feedback, tapping or mouthing.
- Students may be auditorily distracted by environmental noises.

- Students may manifest other behaviours such as echolalia, self-stimulation and egocentricity in their interpersonal skills, especially if there are other disabilities.

It is important to choose the correct assessment instruments so that the assessments do not disadvantage students on the basis of visual loss³. Hence, tests that rely heavily on students' visual ability should be used with caution, especially timed tests. It is also important, for tests that require Braille reading, to enquire about students' Braille reading ability.

The following conditions are recommended for assessing students with VI^{2,6}:

- Assessors should ensure an appropriate testing environment with minimal distractions and adequate lighting as variable visual loss can be affected by lighting conditions.
- Assessors must take time to describe testing materials that are part of the test. Students should be given the opportunity to experience touching the materials before the test starts.
- Where applicable, students should be allowed to respond to the assessment in ways that they are best able to⁷.
- Typed material should be represented in large print. A copier may be used to enlarge a stimulus, though this may result in a loss of colour. A video magnifier^b can achieve stimulus enlargement without the loss of colour. Devices of software with Optical Character Recognition (OCR) function can provide synthesized speech⁸.
- Felt-tip pens are preferred to pencils if writing instruments are necessary. The use of a thicker and darker pen provides better visual contrast.
- When assessing students with colour blindness, use high black/white contrast paper instead of coloured paper. If instructions are written on the whiteboard, use high contrast markers. Where appropriate, the name of colours should be labelled if they are relevant to assessment instructions¹¹.
- Breaks should be allowed during assessment as students can suffer from visual fatigue. Assessors should consider behaviour such as rubbing of eyes, teary eyes, or excessive blinking as sign of visual fatigue and provide breaks where appropriate.

In administering cognitive assessments to students with VI, assessors should note that many of the tests are adaptations of instruments that are used for the sighted while others are designed specifically for students with visual impairment^c. Hence, assessors are advised to be mindful when considering assessment tools for use with students with VI; specifically, the strengths and limitations on the tests when used with students with visual impairment⁹.

4.2 Assessment Considerations for Students with Hearing Loss

Hearing Loss (HL) is defined as a diminished ability to detect, recognise, discriminate, perceive, and/or comprehend auditory information¹². Hearing loss can be unilateral (in one ear) or bilateral (in both ears), and its severity can range from mild to profound. Hearing loss can be conductive (may be treatable), sensorineural (will benefit from augmentative or amplification hearing devices such as hearing aids, cochlear implants), or mixed.

As students with HL may use spoken language, a sign language, or a combination of spoken and sign languages, the foremost principle to bear in mind is that the assessment should be conducted in the student's primary language and preferred mode of communication^{13,14,15}. This can be determined through an interview with the student's parents or teachers. 'Sign language' refers to the natural sign language of the student e.g., Singapore Sign Language (SgSL), and not necessarily a manually coded sign system e.g., Signing Exact English (SEE)^e.

It is important to choose the appropriate assessment instruments so that the assessments do not disadvantage students on the basis of their HL. This is particularly so, as instruments are not typically normed on HL populations, nor designed for sign language use. As such, the accompanying use of informal assessments such as behavioural observations, rating scales, and structured interview formats with parents, teachers and the student, alongside standardised tests, is recommended^{13,14}.

A number of factors need to be taken into consideration to inform assessments of students with HL, including type and level of severity of the HL, age ("hearing age" of the student) and effectiveness of amplification devices, primary language in the home and preferred mode of communication (e.g., sign, spoken or both).

Assessors need to be aware that students with HL are likely to present with speech and language difficulties, which may impact the areas of vocabulary, grammar, sentence structure and/or speech intelligibility. During assessment, it is helpful for assessors to be familiar with the speech patterns of students they assess. Students should not be penalised for articulation differences that are part of their typical speech. Students should also not be penalised for using other communication modalities such as writing, sign language, or a communication board or device. Arrangements will have to be made for a signing interpreter if necessary.

The following considerations are recommended for assessing students with HL:

- The assessment context should be similar to students' usual context, that is, students should wear hearing aids during the

assessment if needed. If students use hearing aids, assessors should remember to review the effectiveness of the hearing aid.

- It is important to ensure that the student with HL understands the task. The assessor may need to modify aspects of test administration or test directions (e.g., break up sentences, use simpler and more concrete terms, allow longer wait time, or use writing or demonstration), or allow for different responses such as pointing, gestures or the use of a communication device^{13,14,15}. As such modifications can weaken overall test validity, they would be need to be discussed in the report appropriately.
- If the assessor is not trained in sign language, an interpreter should be employed to provide the communication bridge for the student whose preferred mode of communication is signing. The interpreter should only interpret the instructions and not provide any prompts to the student. It should be borne in mind that when signing test instructions, potential clues can be given to the student, especially when using conceptual signs e.g., “hat” or “umbrella”. This could affect test validity and would need to be discussed in the report appropriately^{13,14}.
- Ensure a conducive testing environment by minimizing auditory and visual distractions, sound vibrations, and background noise. The assessor should sit directly in front of student rather than to the side. The interpreter, if there is one, could sit slightly behind the assessor^{13,14}.
- Students with cochlear implants or newly fitted augmentative hearing devices may produce significant improvement in speech and language skills after some years¹⁶. Therefore, a re-assessment of student’s language skills should be done within two to three years of the cochlear implant or augmentative hearing device so as to review their functioning.

4.3 Assessment Considerations for Students with Central Auditory Processing Disorder

Central Auditory Processing Disorder (CAPD) is defined as problems in one or more of the following auditory behaviours despite normal peripheral hearing: auditory performance, sound localisation and temporal processing^{17,18}.

Students with CAPD are often uncertain about what they hear under different listening conditions even though they have normal peripheral hearing. For example, they may have difficulties listening to or following directions in background noise, and understanding rapid and/or recorded speech or speech from unfamiliar speakers¹⁹.

In the assessment for a CAPD diagnosis, other conditions such as peripheral hearing loss, attention, memory and cognitive related disorders, as well as speech and language disorders need to be ruled out first, before a diagnosis of CAPD can be made.

While students' responses to certain psycho-educational tests may suggest deficits in auditory processing skills, it is not sufficient to diagnose CAPD solely based on cognitive assessment. The audiologist plays a key role in the diagnosis and overall management of CAPD using a variety of audiological assessment tools to evaluate the processes of the central auditory system. The diagnosis is done in the context of a multidisciplinary assessment which can comprise an audiologist, a doctor, a psychologist, and a speech language therapist²⁰.

A CAPD diagnosis can only be made after the age of seven so as to allow students' language development to stabilise²¹.

The following conditions are recommended for assessing students with CAPD:

- Assessors should ensure that the listening environment is optimal during the assessment and noise levels are kept to a minimum to avoid distractions.
- The speed of delivery of verbal instructions should be slowed down to ensure the student is able to comprehend the auditory signals as best as possible.
- Frequent breaks can be given during assessment to avoid auditory fatigue.

4.4 Assessment Considerations for Students with Cerebral Palsy and Other Significant Motor Impairments

Cerebral Palsy (CP) refers to a group of disorders of movement and posture, causing activity limitations which are attributed to non-progressive disturbances that occurred in the developing foetal or infant brain. CP is often accompanied by disturbances of sensation, perception, cognition, communication and behaviour; by epilepsy; and by secondary musculoskeletal problems²².

Apart from CP, other conditions which may be associated with significant motor impairments include muscular dystrophy and spina bifida. Students may present with combinations of weakness, hypotonia, dystonia, spasticity, contractures, sensory disorders, cognitive deficits, and other medical comorbidities.

In preparation for an assessment, it is important to understand the characteristics of students with CP and other significant motor impairments that may influence the assessment:

- Students with a diagnosis of CP and other significant motor impairments may have multiple medical issues, including epilepsy, visual and hearing abnormalities, gastrointestinal and nutritional problems. An update on medical concerns as well as their management is essential prior to an assessment. This would include new diagnoses of medical comorbidities, recent changes in medication or intervention, or recent surgery³⁶.
- Motor impairments, unusual appearance, and difficulties with speech, balance and gait may mask intelligence in students with CP and other significant motor impairments. Intellectual disability should not be immediately assumed as a co-morbid condition^{23,24}. On the other hand, assessors must also be cognisant of other possible co-morbid impaired cognitive functions such as attention and perceptual deficits.
- Problems such as poor coordination and abnormal muscle tone interfere with students' manipulation of materials and make it difficult for students to respond to some motor tasks in a meaningful way²³.
- Irregular sleep patterns and poor sleep quality are common among students with CP and these may result in daytime problems such as poor alertness, drowsiness, and decreased cognitive performance²⁴.
- Pain is a common problem for individuals with CP, and can be difficult to assess in a non-verbal student. Possible sources of pain include: neuromuscular (muscle spasms), musculoskeletal (hip dislocation, scoliosis) and gastrointestinal (gastroesophageal reflux, constipation). Pain may affect test performance^{25,35}.

The following considerations should be made when choosing an appropriate assessment tool:

- The assessment of cognitive functioning is often challenging in students with motor impairment because the majority of tests require verbal and motor responses²⁴. A careful consideration of the level of motor, communication, and/or visual or visual perception impairment in students with CP and motor impairments can inform assessors on the choice of cognitive assessment battery to use²⁶. The use of Assistive Technology, together with alternative response modes (e.g., partner assisted scanning) is encouraged to enable access to standardised cognitive assessment^{27,28}. Assessors should be mindful of how these modifications may affect the validity of the assessment.

- For students with significant motor impairments for whom standardised cognitive assessments are not appropriate, the use of developmental scales, which assess progress along a continuum rather than providing comparative performance data with peers, may be an appropriate alternative^{24,26}.
- For students with severe motor impairments, it is important to conduct a functional skills assessment^{29,30}. A functional skills assessment targets the skills needed in a given environment and activity, and includes measures of social and adaptive functioning with a focus on basic life skills^{29,30,32,34}. It focuses on practical independent living skills. It also considers students' functioning in their environments, and examines the process of learning and performance. Based on the results of the assessment, intervention techniques are implemented and evaluated on a regular basis²⁹.

The following test accommodations are helpful in supporting students with significant motor impairments so as to obtain the best responses during the assessment session²³:

- Body positioning is of specific relevance to students with significant motor impairments. Students should be positioned in a way that facilitates the support of the trunk and independent use of the arms and hands. This can be done via the use of an Adaptive Seating System (AdSS)³³. Appropriate positioning can reduce pain, permit better fine motor function, facilitate attention, reduce fatigue, and promote improved social interaction, thereby optimising performance. Assessors should consult a physiotherapist on the positioning of students for testing.
- Students should be allowed to use assistive technology such as Augmentative and Alternative Communication (AAC) devices³¹ to enhance their functional communication.
- Information on the student's communication style and modality should be determined before assessment. It may be helpful to involve the family, caregivers and therapists who work closely with the student to assist in understanding the student's responses.

4.5 Assessment Considerations for Students with Developmental Coordination Disorder

Developmental Coordination Disorder (DCD) is a neurodevelopmental condition characterised by difficulties with coordination of either gross or fine motor movements, or both. The acquisition and execution of coordinated motor skills is substantially below that expected given the

individual's chronological age and opportunity for skill learning and use, with onset of symptoms in the early developmental period.

DCD is diagnosed when the motor skills deficit significantly and persistently interferes with activities of daily living appropriate to chronological age and impacts academic/school productivity, leisure, and play, and cannot be better explained by medical conditions e.g., cerebral palsy, intellectual disability or visual impairment^{37,38,39}.

DCD should be diagnosed by a multidisciplinary team of healthcare professionals usually consisting of a doctor (e.g., developmental paediatrician, paediatric neurologist) and an occupational therapist or physiotherapist trained in the use of standardised motor assessment tools for children suspected of having DCD³⁸.

The following conditions are recommended when assessing students with DCD⁴⁰:

- Care should be taken for student to be positioned properly for desk work. Make sure that the child's feet are flat on the floor, and that the desk is at an appropriate height with the shoulders relaxed and the forearms supported on the desk.
- The student with DCD is likely to have difficulty balancing the need for speed with the need for accuracy. Hence, consider providing extra time for test items that require precise fine motor response (e.g., handwriting and arranging manipulatives). If speed is necessary, make allowance for a less accurate product (e.g., messy handwriting).
- When possible, allow alternative response modes (e.g., scribes or computer access) for test items that require large amounts of written output.

In addition, DCD is often found in combination with other developmental disorders e.g., Attention-Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD) or specific learning disabilities⁴¹. The presence and effects of these conditions should be taken into consideration during assessment.

4.6 Assessment Considerations for Students with Attention Deficit Hyperactivity Disorder ^f

Attention Deficit-Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder, characterised by the core symptoms of inattention, hyperactivity and/or impulsivity. In the assessment and diagnosis of students with ADHD, the Clinical Practice Guidelines (CPG) on Attention Deficit-Hyperactivity Disorder (ADHD), developed by the Academy of Medicine, Singapore (AMS) and Ministry of Health (MOH)⁴² highlight the following important considerations for a diagnosis of ADHD:

- The characteristics of inattention and hyperactivity/impulsivity, as listed in Diagnostic and Statistical Manual of Mental Disorders (DSM-5)⁴³ must occur in more than one setting before age 12 years. A careful evaluation should be conducted to exclude physical or psychiatric conditions which can also account for ADHD-like symptoms.
- An investigation towards possible ADHD should be made through a thorough clinical assessment involving more than one informant and one setting. It should therefore involve assessments (e.g., through interviews) with the parent/significant caregiver (home setting) and with teachers (school setting), in addition to standardised testing for the student.
- When testing for ADHD symptoms in an older student (e.g., aged 17 and above), the assessor should consider possible differences in clinical presentation at an older age. Reference can be made to examples for each symptom that are relevant for adolescents listed within DSM-5.
- Testing of executive functioning (e.g., working memory, planning processes) could be considered as part of ADHD assessment.
- A dual diagnosis of ADHD with Autism Spectrum Disorder (ASD) is possible. This implies that an individual with ASD should not be excluded for possible ADHD diagnoses.
- Students with ADHD may have other co-morbid conditions. The presence and effects of these co-morbid conditions (e.g., depression, anxiety) must be taken into consideration during assessment.

The following considerations should be made in the assessment and diagnosis of students with ADHD:

- When assessing students with ADHD who have been prescribed with medication, the assessors need to consider the effects of medication on student performance:
 - a. If the purpose of assessment is to document the severity of ADHD symptoms, medication may not necessarily be taken during psycho-educational assessments.
 - b. If the purpose of assessment is to obtain optimal performance in a psycho-educational assessment, assessors need to ensure that the medications are taken as per usual routine. In the event of changes to the types or dosage of medication, assessors need to wait for the effect of medication to stabilise before commencing on the assessment.
 - c. The use of medication taken on the day of assessment should be documented in the report.
- Frequent breaks can be provided between subtest administrations to ensure optimal attention during assessment.

Assessors should ensure that distractions in the assessment venue are minimised. The assessment sessions can also be broken down to separate sessions, when necessary, within reasonable time intervals between testing recommended by test publishers.

4.7 Assessment Considerations for Students with Dyslexia

Dyslexia is a type of specific learning difficulty identifiable as a neurodevelopmental disorder. It primarily affects the skills involved in accurate and fluent reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and processing speed. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia⁴⁴. Dyslexia is also recognised as Specific Learning Disorder with impairment in reading in the DSM-5⁴³.

The diagnosis of dyslexia should be made by a qualified educational and/or clinical psychologist. In the assessment of dyslexia, it is important to consider the following:

- The observed difficulties exist despite provision of appropriate literacy intervention. An appropriate literacy intervention should include the following components: phonemic awareness, phonics, fluency, vocabulary and comprehension⁴⁵.
- The observed difficulties are not primarily the result of intellectual disability; visual, hearing or motor difficulties; emotional disturbance; environmental or economic disadvantage; or inadequate exposure to the English Language^{43,44}.
- Different sources of information should be incorporated to substantiate reading difficulties (and differential diagnosis).
- Diagnosis of dyslexia in a language other than English should be based on appropriate literacy assessments in the language concerned.
- Dyslexia is not caused by eye or visual problems⁹.

In the assessment of students for dyslexia, two approaches are recognised:

a. Response-to-intervention^{44,46,47}

In this approach, students who continue to demonstrate reading and spelling difficulties or a lack of progress despite being provided with sustained and intensive evidence-based intervention targeted at addressing phonological processing and other literacy difficulties, can be identified to have dyslexia. Critical to the assessment is the use of progress monitoring data collected systematically to ascertain response to intervention within a comprehensive system of developmentally-

appropriate literacy support in schools^{44,46,47}. In mainstream primary schools in Singapore, all students go through a national English curriculum and additional literacy intervention is provided to those whose literacy needs cannot be adequately addressed by the national curriculum. As part of the additional literacy intervention, progress monitoring data is collected to assess the acquisition of early literacy skills, including phonological awareness, alphabetic principle and phonics, reading accuracy and fluency^h. Further assessments on language and cognitive ability may be conducted, if necessary. In the context of the response-to-intervention approach in the dyslexia assessment, the use of standardized measures of intelligence would only be necessary as part of the diagnostic procedures to exclude intellectual disability, if it is suspected^{43,44,46,47}.

b. *Comprehensive standardised psycho-educational assessments.*

A comprehensive psycho-educational assessment can be conducted to ascertain students' areas of strengths, weaknesses and appropriate intervention. The assessment must demonstrate deficits in phonological awareness⁴⁸ and one or more of the following areas: reading accuracy, reading fluency, and spellingⁱ. In addition, a comprehensive assessment should take into account the student's background, instruction and intervention received, and should include students' functioning in language, cognition and adaptive skills.

The IQ-achievement discrepancy approach (i.e. diagnosing dyslexia due to lower than expected reading achievement based on IQ) is not recommended, as current research shows little support for it^{44,46,47}.

When assessing students with dyslexia, it is important to consider the following areas^{49,50}:

- The multidimensional nature of literacy skills and its underlying phonological basis.
- Students' fluency in reading and writing. This is necessary because, with instruction, students may be able to cope with basic word reading, although difficulties with fluency often remain.
- Difficulties in language, mathematics and visual-spatial domains which may present additional barriers for students with dyslexia.
- Emotional and motivational issues arising from persistent difficulties in learning.

4.8 Assessment Considerations for Students with Language Disorder

Language Disorder is the persistent difficulty in the acquisition and use of oral (spoken) language, where the difficulty is of such severity as to create significant long-term challenges in daily communication and educational attainment^{52,53}.

Students with Language Disorder may show deficits in the understanding and/or use of⁵² spoken vocabulary (e.g., difficulty in naming words); spoken sentences (e.g., difficulty in following long spoken instructions); and/or spoken narratives (e.g., difficulty in understanding extended spoken explanations and in telling complete stories); this may result in literacy difficulties.

Language Disorder will be evident in all languages a student speaks^{54,55}, and the difficulties may present differently in each language. In addition, a student may have different levels of difficulties in the understanding (receptive) and use (expressive) of spoken language.

Students whose language difficulty has no obvious cause are described as having Developmental Language Disorder (DLD), also known as Specific Language Impairment (SLI), Language Learning Disability (LLD), or a language-based learning disability⁵³.

The Speech Language Therapist plays a key role in the assessment and diagnosis of Language Disorders. The diagnosis of Language Disorder may also be done in the context of a multi-disciplinary assessment using standardised tests of receptive and expressive language abilities. Evidence of a student's understanding and use of spoken language in different contexts and/or dynamic assessments should be considered together with standardised test results. Assessors should ensure that students' difficulties are not primarily the result of:

- a visual, hearing and/or motor difficulty;
- speech sound disorders or fluency disorders such as stuttering;
- language proficiency differences in multi-lingual speakers or inadequate exposure to language-rich learning environments; and/or
- emotional and behavioural disorders (e.g., depression, selective mutism, anxiety, ADHD, oppositional defiant and conduct disorder)⁵⁴.

Students with Language Disorder may find the demands of a language assessment challenging. It is therefore important to clearly explain the assessment format, process and duration, and allow the student time to process and understand instructions. Where required and within test publisher's limits, short, simple and specific task explanations with visual support can be given.

The following should be considered in the assessment and diagnosis of students with Language Disorder:

- the student's age and language abilities in all languages the student hears and/or speaks;
- the norms of language acquisition in the local context, and influence of cultural and dialectal language differences for

- students whose dominant language is not Standard English; and/or
- the impact of co-occurring difficulties and/or conditions (e.g., attentional problems, organisational difficulties, other primary conditions such as Autism Spectrum Disorder, Intellectual Disability, hearing loss, neurological injury, Cerebral Palsy, Down Syndrome).

4.9 Assessment Considerations for Students with Speech Sound Disorder

Speech Sound Disorder (SSD) is a persistent difficulty that affects speech intelligibility and can interfere with verbal communication. It involves one or a combination of the following^{43,56}:

- difficulties in motor production or articulation of target speech sound(s);
- difficulties with perception and/or production of the phonological representation of the speech sound; and
- difficulties with intonation and prosody affecting speech intelligibility.

SSD includes one or more of the following:

- Articulation delay/ disorder
- Phonological delay/ disorder
- Childhood apraxia of speech^j or verbal dyspraxia
- Dysarthria^k

Conditions such as structural conditions (e.g., craniofacial abnormalities), syndrome-related disorders (e.g., Down syndrome), neurological-based conditions (e.g., Cerebral Palsy) and sensory-based difficulties (e.g., hearing) can cause SSD⁴³.

SSD may result in anxiety and stress in speaking situations. Students with SSD may also avoid situations, such as asking a question in class or delivering a class presentation. Some may also develop social anxiety or suffer from teasing.

The diagnosis of speech sound disorder should be made by a qualified speech language therapist. The assessments may include⁵⁷ oral motor examination, speech sound assessment (single words and connected speech sample), and speech perception testing (e.g., auditory discrimination of minimal pairs)

The following considerations are recommended in the assessment and diagnosis of students with SSD:

- student's age and the norms of speech sound acquisition in the local context;
- the influence of cultural and dialectal variation on speech of the student; and/or
- the impact of co-occurring sensory difficulties (e.g., hearing) and other language difficulties and fluency disorders (e.g., stuttering, cluttering)⁴³.

4.10 Assessment Considerations for Students with Stuttering

Stuttering, also known as stammering or childhood-onset fluency disorder⁴³, is a persistent disturbance in speech fluency⁴³. Stuttering may be developed at a young age or acquired after a neurological event such as traumatic brain injury⁶⁰. It is characterised by one or a combination of the following^{60,43}:

- sound or syllable repetitions; part word or word repetitions; or sound prolongations;
- blocks, pauses where no sound comes out even though the speaker knows exactly what word they want to say;
- excessive use of fillers (e.g., “erm”, “uh”, “like”); and/or
- nonverbal superfluous behaviours including but not limited to facial grimaces, lip tremors, breath holding, grunting, and audible inspiratory airflow

Disturbances in speech fluency may result in secondary stuttering behaviors such as anxiety and stress towards speaking situations. Students with stuttering may also avoid situations that require asking a question in class or delivering a class presentation⁶⁰.

The diagnosis of stuttering should be made by a qualified speech language therapist. The assessments may include⁶⁰ quantitative rating (e.g., percentage syllables stuttered) or qualitative rating (e.g., severity rating).

The following considerations are recommended in the assessment and diagnosis of students with stuttering^{60,43}:

- the student's age, the norms of language acquisition in the local context, and speech fluency in different situations;
- co-occurring language disorder and speech sound disorders; and/or
- that the difficulties are not primarily the result of visual, hearing or motor difficulty; variations in speech fluencies within normal limits; medication side effects; or Tourette disorder.

4.11 Assessment Considerations for Students with Social Communication Disorder

Social Communication Disorder (SCD) is characterised by persistent difficulties in all of the following four areas⁶¹:

- a. *deficits in using communication for social purposes* (e.g., unable to use greetings that are appropriate to context, recipient, and/or setting);
- b. *impaired ability to adapt communication to match different social contexts* (e.g., difficulties in telling and understanding stories/personal experiences and/or sharing new information based on awareness and insight of listener's previous knowledge);
- c. *inability to follow conventional rules for conversation and/or storytelling* (e.g., not using appropriate variations in verbal prosody and non-verbal language such as gestures to regulate an interaction); and
- d. *problems understanding what is not explicitly stated* (e.g., not understanding information that are inferred or implied by others). This would typically involve higher order language skills such as inferencing, deductive reasoning and/or figurative use of language required in academic learning.

SCD symptoms may result in significant limitations on the individuals' ability to develop social relationships, and in learning. They may also manifest behavioural and emotional difficulties as a result of frustration due to poor social communication skills⁴³.

The diagnosis of SCD should be done in the context of a multidisciplinary assessment comprising input from a medical doctor, a psychologist, and a speech language therapist. The speech language therapist plays a key role in the diagnosis and overall management of SCD using a variety of language and communication assessment tools to evaluate the processes of social communication and interaction.

The assessments to identify specific challenges in social communication should only be conducted when individuals have demonstrated adequate speech and language abilities, which is commonly at 4 or 5 years of age. It is likely that individuals with SCD may only come to the attention of professionals in their school-aged and young adult years as deficits may only fully manifest when social demands exceed the individual's capacity. A detailed developmental history should therefore be conducted to determine the onset of the symptoms.

A clear evaluation of pragmatic communication, based on observations in natural environments and/or reports from key stakeholders (e.g.,

parents / caregivers, teachers, and/or peers), should be made. Assessors should collect and make reference to communication samples which highlight the student's:

- conversation skills, interpreting verbal and nonverbal communication, comprehension of verbal and nonverbal discourse in social, academic, vocational, and/or community settings; and
- comprehension of figurative and ambiguous language and making inferences when information is not explicitly stated.

The following conditions should be considered in the assessment and diagnosis of students with SCD:

- Other conditions such as hearing loss, speech and language impairment, ASD, and cognitive-related disorders need to be ruled out first, before a diagnosis of SCD can be made. Existing research suggests that while there are features that may differentiate those diagnosed with SCD from those with ASD, these differences appear to fall along a continuum, rather than having discrete categories^{43,63,64,65}. Individuals with SCD appear to have better expressive language skills, show milder difficulties in basic social interaction skills and display fewer or no restrictive and repetitive behaviours^{65,66}.
- Students with SCD have poor social communication skills and the social demands of an assessment setting can be very stressful. As a result, they may not participate optimally in the test session.
 - During the assessment, assessors should provide clarity and predictability of assessment structures and routines (e.g., work schedule, sensory supports, and use of reward charts).
 - In the event that the student with SCD shows signs of distress, assessment should be stopped immediately and the assessor should allow time for the student to regulate.
 - Where required, and within test publisher's limits, assessors should give short and specific instructions augmented with visuals (e.g., photographs, symbols, signing, written instructions, and demonstrations); break down instructions into smaller achievable steps, and avoid the use of long questions; as well as use language that is literal and which explicitly states what is expected or meant.
- Students with SCD may have other co-morbid conditions, such as attention deficit hyperactivity disorder, mood disorders, anxiety disorders, cognitive and/or learning disabilities. The presence and

effects of these co-morbid conditions must be taken into consideration during assessment.

4.12 Assessment Considerations for Students with Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is a lifelong, developmental disability that affects how a person communicates with and relates to other people, and how they experience the world around them. It is a neurological disorder which means it affects the functioning of the brain⁶⁶. The effects of autism and the severity of symptoms are different in each individual.

The essential features of ASD⁴³ are:

- persistent impairment in reciprocal social communication and social interaction; and
- restricted, repetitive patterns of behaviour, interests, or activities.

A diagnosis of ASD should only be given by specially trained psychologists, child psychiatrists, or developmental paediatricians who are familiar with and have clinical experience in diagnosing ASD. It is strongly recommended that autism-specific behavioural evaluations and assessment protocols are used in the evaluation for diagnosis of ASD (e.g., the Autism Diagnostic Observation ScheduleTM, Second Edition and the Autism Diagnostic InterviewTM, Revised). For young children under 7 years old, a typical ASD diagnostic evaluation involves a multi-disciplinary team which may include a paediatrician, psychologist, psychiatrist, speech and language pathologist, and occupational therapist.

Students with ASD may have other co-morbid conditions, such as epilepsy, attention deficit hyperactivity disorder, mood disorder, anxiety disorder, cognitive and/or learning disabilities⁶⁹. The presence and effects of these co-morbid conditions must be taken into consideration during assessment.

An educational determination for students with ASD should be made based on firstly, the severity of autism symptoms assessed and the corresponding levels of social and communication supports required, and secondly, the student's ability to cope with a mainstream or a special education curriculum. A cognitive assessment is not a necessity for an ASD diagnosis. Within the ASD population, IQ scores may not be indicative of the severity of the student's autism symptoms, i.e. high IQ scores are not, in themselves, indicative of "mild" ASD. Refer to Chapter 5 for recommendation and considerations for placement.

The following conditions should be considered in the assessment and diagnosis of students with ASD:

- Behaviours relevant to an ASD diagnosis are likely to vary according to different environmental contexts, and so it is important that information is collected about a student's behaviour in a variety of settings during an ASD assessment. Additional information including the student's skills in language, literacy, numeracy, and self-regulation domains should be collected and reported to provide a holistic picture of his / her needs.
- Students with ASD may have unique strengths and communication styles, uneven patterns of skill development, and unusual motivators or aversions (e.g., sensory and tactile-based stimuli)⁶⁷. Prior to assessment, assessors should seek to understand the student's preferences, interests, needs, and strengths that might impact the assessment process.
- Students with ASD have difficulty reading social cues in the environment and have a strong need for predictability. Social demands in any situation can be very stressful and as a result, they may not participate optimally in the test session. During the assessment, assessors should provide clarity and predictability of assessment structures and routines (e.g., work schedule, sensory supports, and use of reward charts).
- Where required, and within test publishers' limits, assessors should give short and specific instructions augmented with visuals⁶⁸ (e.g., photographs, symbols, and written instructions) as well as at least five seconds of processing time, to increase access to instructions during the assessment.
- Frequent breaks can be provided between subtest administrations to ensure optimal attention during assessment. Assessors should ensure that distractions in the assessment venue are minimised. The assessment sessions can also be broken down to separate sessions, when necessary, within reasonable time intervals between testing recommended by test publishers.
- As students with ASD may react strongly to unpredictable and new environments by demonstrating challenging behaviour, assessors may need to employ strategies to calm students (e.g., providing a calming down area) during testing. Should a meltdown occur, assessment should be stopped immediately, and assessors should allow time for the student to regulate.

4.13 Assessment Considerations for Students with Intellectual Disability

Intellectual Disability (ID)⁴³ is a neurodevelopmental disorder defined as having limitations in intellectual and adaptive functioning; the latter as expressed in the conceptual, social and practical domains. Diagnosis of ID^m must meet the following three criteria:

- a. age of onset in the developmental period, i.e. below 18 years oldⁿ;
- b. the presence of intellectual deficits; and
- c. adaptive functioning deficits.

The diagnosis of ID should be made by a psychologist through the use of valid and reliable standardised assessments of intellectual and adaptive functioning. In addition, the assessment should include students' current and past educational performance, intervention history, family information, developmental history, medical history (e.g., Williams Syndrome, Down Syndrome, epilepsy), psychiatric and other histories (e.g., Attention-Deficit/Hyperactivity Disorder, schizophrenia, Obsessive Compulsive Disorder, depressive and bipolar disorders, mood disorders, autism spectrum disorders). Cultural, linguistic and environmental factors (e.g., lack of opportunity) need to be considered as well.

The degree of a student's ID can occur across a range from mild to severe levels (See Chapter 5 for operational definitions of deficit levels in cognitive and adaptive functions). In ascertaining the severity levels of students with ID, greater emphasis should be placed on adaptive functioning levels, rather than just cognitive deficits⁷⁰. This is because IQ measures are less valid at the lower end of the IQ range, and taken alone, may not adequately capture the needs of students and the level of supports they require. In the assessment of adaptive functioning, the validity and reliability of data obtained is optimised when a standardised instrument is used, and corroboration is obtained from more than one context, as well as from multiple sources, e.g., parents/caregivers and teacher's reports⁹.

Students with ID may have communication and physical limitations that make formal assessment challenging. In such situations, psychologists should consider carefully the choice of standardised assessment tools to be used so as not to disadvantage the students. For example, some standardised cognitive tests allow for alternative administration procedures of timed test items where a student's motor dexterity may disadvantage him/her, and the student's performance on these items may be a more appropriate and valid indicator of his/her non-verbal cognitive abilities (see Chapter 2, Section 2.4 for further guidelines on the selection of standardised assessments tools).

Additional care should be exercised when assessing individuals with visual impairment or hearing loss (see Section 4.1 and 4.2). Preferably, these individuals should be assessed using instruments normed on

these specific populations and administered by trained assessors. The assessor could choose to only administer selected subtests (e.g., performance or verbal subtests only, in combination with an adaptive scale⁷⁰). However, a score based on selected subtests does not constitute a full intellectual assessment and provides only an approximation of an IQ score.

The following considerations are recommended in the assessment and diagnosis of students with ID:

- The students may have additional difficulties which need to be taken into consideration during an assessment. For example, they may have difficulties in motor skills, attention, verbal comprehension and expression.
- Emotional and motivational problems arising from persistent difficulties in learning may result in task avoidance and test fatigue.

4.14 Assessment Considerations for Students with Multiple Disabilities

Students with multiple disabilities have two or more simultaneous impairments, the combination of which causes such severe SEN that they cannot be accommodated in special education programmes designed solely for one of the impairments⁷¹. Multiple disabilities have interactional rather than additive effects, making instruction and learning complex.

Examples of common Multiple Disabilities^{72,73} include:

- sensory and cognitive impairments such as visual impairment and intellectual disability;
- sensory and physical impairments such as blindness and paraplegia; and
- cognitive and physical impairments such as intellectual disability and spastic quadriplegia. (See the respective sections in Chapter 4 for the assessment considerations for each of the specific disabilities involved).

Multiple disabilities^p often coexist with medical issues, which may be complex and evolving. These medical issues or their treatment may impact performance during an assessment. Even if the student did not present initially with medical concerns, it would be useful to obtain updated information from parents and caregivers regarding any new medical diagnoses, such as seizures or epilepsy, respiratory conditions, the use of medications or other interventions, recent surgery, changes in medications and prognosis^{74,75,76}.

In preparation for an assessment, it is important to understand the characteristics of students with multiple disabilities that may influence the assessment. These include ^{72,73}:

- limited or absent expressive and/or receptive communication;
- difficulty in basic physical mobility;
- tendency to forget skills through disuse;
- trouble generalising skills from one situation to another;
- difficulty with carrying out everyday life activities (e.g., domestic, leisure, community use, vocational);
- alertness, i.e. how alert the students are, the duration that the students can remain alert, and the variables affecting their alertness
- inability to attend to tasks / short length of attention span; and/or
- orienting reflex, i.e. the students' preferred way of showing that they have oriented to a stimulus.

In addition, assessors need to understand the various subtle responses and communication forms of students with multiple disabilities. For example, a response to presented stimuli during assessment may be inconspicuous, such as a change in respiration, muscle tone, vocalisation, quieting and/or slight body movement or stilling⁷⁶.

The limitations faced by students with multiple disabilities can so impede their daily living that a functional skills assessment is crucial in establishing the child's level of competence. A functional skills assessment targets the skills needed in a given environment and activity, and includes measures of social and adaptive functioning with a focus on basic life skills^{30,34}.

Observation of the student in his/her natural setting (i.e. intervention centre, childcare, home) enables an accurate understanding of the student's full potential and adaptive needs.

In addition to a functional skills assessment, students with multiple disabilities may require environmental modifications (e.g., specially designed chairs for trunk support and/or the use of low lighting).

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Endnotes

- a. Visual field refers to the entire area that can be seen with the eye, including peripheral vision. The visual field is the portion of the individual's surroundings that can be seen at any one time. The normal extent of field of vision is 50° superiorly, 70° inferiorly, 60° nasally (i.e. towards the nose) and 90° temporally (i.e. towards the ear). A visual field defect is a loss of part of the usual field of vision. (Retrieved from <http://www.patient.co.uk/doctor/Visual-Field-Defects.htm>)

Visual efficiency refers to a group of visual skills important for success in school, sports, driving, and the modern workplace. Visual efficiency skills include: depth perception, colour perception, and oculomotor skills such as eye teaming, eye movement, and eye focusing speed and accuracy. An individual with 20/20 vision can still have problems with visual efficiency skills. (Retrieved from http://www.visionfirstfoundation.org/vision_faq.php#2)

Visual fatigue provides a label for conditions experienced by individuals whose work involves extended visual concentration. It describes phenomena related to intensive use of the eyes. It can include complaints of eye or periocular pain, itching or burning, tearing, oculomotor changes, focal problems, performance degradation, "after colours," and other phenomena. (Retrieved from <http://www.mdguidelines.com/visual-fatigue>)

Visual figure-ground perception is the ability to distinguish an object from the background field. (Retrieved from <http://psychology.jrank.org/pages/246/Figure-Ground-Perception.html>)

- b. In the local context, the term 'closed-circuit television' (CCTV) is often used interchangeably with the term 'video magnifier'.
- c. An example of a test that is designed specifically for students with VI is the Intelligence Test for Visually Impaired Children (ITVIC).

- d. A refractive error is a problem with the accuracy of focus of light onto the retina due to the shape of the eye. This results in blurred vision.
- e. If Signing Exact English (SEE) is the sign language most familiar to the child, then it should be used as the sign language of the assessment.
- f. This section takes reference from the published clinical practice guidelines (CPG) on Attention Deficit-Hyperactivity Disorder (ADHD), developed by the Academy of Medicine, Singapore (AMS) and Ministry of Health (MOH)⁴².
- g. There is still no sound theoretical basis or evidence that Irlen Syndrome exists as a condition. In addition, the evidence that reading difficulties can be treated by vision therapy, tinted lenses or filters is weak. Consequently, the medical community does not endorse the condition or the treatment of the condition. Reference 1: American Academy of Pediatrics (2009). Joint Statement – learning disabilities, dyslexia and vision. *Pediatrics*, 124(2), 837 – 844. Reference 2: The Royal Australian and New Zealand College of Ophthalmologists (2018). RANZCO Position Statement: Irlen Syndrome.
- h. Students who had received specialist phonologically-based intervention are likely to have improved in their phonological skills and may not demonstrate phonological impairments when assessed⁵¹.
- i. Assessment of literacy difficulties in a language other than English should be based on appropriate literacy assessments in the language concerned.
- j. Childhood apraxia of speech (CAS) refers to a speech disorder where a child has difficulties producing accurate movements in speech. CAS is a motor planning disorder. It is not due to muscle weakness. A child with CAS may have consonant and vowel errors/ distortions, as well as difficulties with speech stress, rhythm and intonation⁵⁸.
- k. Dysarthria refers to a speech disorder that is due to muscle weakness or difficulties controlling the muscles used for speech⁵⁹.
- m. The term Intellectual Disability is also used interchangeably with the term Intellectual and Developmental Disability (IDD). The term Intellectual and Developmental Disability (IDD) is presently used by the American Association on Intellectual and Developmental Disabilities (AAIDD) and the International Association for the Scientific Study of Intellectual and Developmental Disabilities (IASSIDD).
- n. The American Association on Intellectual and Developmental Disabilities (AAIDD) defines the developmental period as under 18 years of age. Retrieved from: <http://aaidd.org/intellectual-disability/definition>.

- o. Some examples of tests that can be used to assess adaptive functioning include the Vineland Adaptive Behaviour Scales, Third Edition (Vineland-3), and the Adaptive Behaviour Assessment System ® (ABAS-3) – Third Edition.
- p. The term Multiple Disabilities (MD) is also used interchangeably with the term Profound and Multiple Disabilities (PMD) in some contexts. The term Profound and Multiple Disabilities (PMD) is presently used by the International Association for the Scientific Study of Intellectual and Developmental Disability (IASSIDD).

Chapter 5: Framework and Pathways for Educational Placement of Students with Special Educational Needs

This chapter provides an overview of the categories of Special Educational Needs (SEN) and the support provisions available, as well as the pathways for educational placement of students with SEN in Singapore. Students with SEN span the full range of disabilities, from high functioning students who are educated in the mainstream schools, to students with severe disabilities who are educated in SPED schools. It should be noted that as the educational landscape evolves with time, the provisions and options available for students with SEN will also change.

5.1 Framework for Special Educational Needs

In the current landscape, a differentiated approach is adopted to cater to the wide ranging needs of students with SEN. On one end of the continuum, students with adequate cognitive functioning and who are able to access the mainstream curriculum are provided with support within mainstream settings; while those with cognitive impairments and who require more intensive specialised support by teachers and allied health professionals to access specialised curriculum are more appropriately placed in alternative specialised settings, namely Special Education or 'SPED' schools. Students with adequate cognitive abilities but significant deficits in adaptive skills and/or sensory and physical functioning may be supported in alternative specialised settings offering the mainstream curriculum.

For assessment of students for the purpose of ascertaining suitability for mainstream or SPED schools, please refer to the guidelines in Chapter 3 (Assessment for Specific Purposes), Sections 3.2 and 3.3 respectively.

5.2 Categorisation of Special Educational Needs

The full range of SEN encompasses a wide spectrum. This could range from high functioning students to students with severe disabilities. In the local context, the following broad categorical descriptors of SEN are used based on the interaction of a student's cognitive and adaptive functioning. These categories are namely: Mild SEN, Moderate SEN, Moderate-Severe SEN, and Severe SEN (see Table 1).

Table 1: Categories of SEN

		Cognitive Functioning		
		Adequate cognitive functioning	Mild cognitive impairment	Moderate to severe cognitive impairment
Adaptive Functioning	Mild deficit in adaptive functioning	Mild SEN	Moderate SEN (b)	Moderate-Severe SEN
	Moderate to severe deficit in adaptive functioning	Moderate SEN (a)	Moderate-Severe SEN	Severe SEN
Legend:  Child better supported in mainstream  Child better supported in SPED schools				

Cognitive Functioning refers to the intellectual processes by which the student becomes aware of, perceives, or comprehends ideas. It involves aspects of perception, thinking, reasoning, and memory. The assessment of the student's cognitive functioning is commonly conducted through (but not limited to) the use of standardised tests of intellectual quotient (IQ)¹⁻³. 'Mild cognitive impairment' is indicated by standard scores that are more than two standard deviations below the mean, while 'Moderate to severe cognitive impairment' refers to standard scores that are more than three standard deviations below the mean. There could also be cases where a student's uneven profile of cognitive abilities may not fit neatly into any one category of SEN. Thorough assessments from multiple professionals would be needed to ascertain the SEN provisions for such cases.

Adaptive Functioning is an umbrella term referring to a range of skills which affects how effectively an individual copes with everyday demands. The main aspects of adaptive functions include the following areas: communication, self-care, home living, motor skills, social / interpersonal skills, self-direction, functional academic skills (literacy and numeracy), work, leisure, health, and safety⁴. The assessment of a student's adaptive functioning is commonly based on (but not limited to) the use of care-givers' or teachers' reports of the student's skills and abilities in everyday activities. The use of standardised protocols for obtaining care-givers' reports on the student's functioning increases the reliability of the information gathered⁵. 'Mild deficit in adaptive functioning' is indicated by standard scores that are more than two standard deviations below the mean, while 'Moderate to severe deficit in adaptive functioning' refers to standard scores that are more than three standard deviations below the mean.

When standardised measures are used to gauge level of functioning, the degree of deficit / impairment should be interpreted with reference to distribution within the population or gap between the student's chronological age and testing age^{6,7}. Caution should be exercised when using or interpreting scores derived from norms that are not appropriate for the local population. In cases where standardised measures are inappropriate, psychologists can also use developmental checklists to ascertain the extent to which a student's adaptive or cognitive abilities are age-appropriate.

Table 2 provides a description of each category of SEN in terms of the students' profile and provisions available in the current landscape.

A student's level of SEN may change over time either in response to intervention, or, as a result of degenerative conditions. Consequently, the category of SEN that best fits the student's profile and needs may also change.

Table 2: Description of SEN Categories

Mild SEN	
Profile	• Adequate cognitive functions; no intellectual impairment. • Cognitive ability within 2 standard deviations from the mean compared to same-aged peers. • One or two aspects of adaptive functioning showing mild deficit, e.g., in physical mobility and/or communication skills. • Student is able to access mainstream curriculum in a mainstream school.
Examples	<i>Students with dyslexia; ADHD; mild ASD (with no co-morbidities); students with mild hearing or visual impairment; or physical impairments (with no comorbidities)</i>
Educational Provisions	• Supported within general mainstream classrooms, with student-teacher ratio* ranging from 30:1 to 40:1. • Additional in-school educational support, where needed, from school-based support programmes or school staff, e.g., teachers trained in special needs, allied educators. • Specialised educational intervention provided outside curriculum hours either in school or by external agencies. • School-based itinerant support for students with physical and sensory impairments by external agencies.

Moderate SEN (a)	
Profile	- Two or more aspects of adaptive functioning showing moderate-severe deficit (i.e. more than 3 standard deviations from the mean compared to same-aged peers in terms of, for example, social skills, communication), or significant hearing loss or visual impairment. - Cognitive ability within 2 standard deviations from the mean compared to same-aged peers. - Student is able to access mainstream curriculum.
Examples	<i>Students with ASD (with adequate cognitive abilities or IQ); Students with significant hearing loss (requiring signing) or visual impairment (without co-morbid Intellectual Disability).</i>
Educational Provisions	- Adapted mainstream curriculum leading to national examinations (e.g., PSLE) according to the student's needs and ability. - Smaller-class sizes* with specialised in-class support. - Additional specialised support in communication, socio-emotional skills, orientation and mobility, where necessary.

Moderate SEN (b)	
Profile	- Two or more aspects of adaptive functioning showing mild deficit (i.e. more than 2 standard deviations from the mean compared to same-aged peers, in terms of, for example, daily living, social skills, communication). - Mild impairment in cognitive functioning (i.e. more than 2 standard deviations from the mean compared to same-aged peers in cognitive abilities). - Significant difficulties in accessing mainstream curriculum.
Examples	<i>Students with Mild Intellectual Disability (with or without ASD); Students with significant hearing loss or visual impairment (with co-morbid Intellectual Disability)</i>
Educational Provisions	- Specialised curriculum (e.g., functional academics, life skills, vocational skills) according to the student's needs and ability. - Smaller-class sizes* with specialised in-class support. - Additional specialised support in speech or occupational therapy, orientation and mobility training, where necessary.

Moderate-Severe SEN	
Profile	- Two or more aspects of adaptive functioning showing mild deficit (i.e. more than 2 standard deviations from the mean compared to same-aged peers, in terms of, for example, daily living, social skills, communication). - Moderate to severe impairment in cognitive functioning (i.e. more than 3 standard deviations from the mean compared to same-aged peers in cognitive abilities). - Significant difficulties in accessing mainstream curriculum, presence of occasional challenging behaviours**.

Moderate-Severe SEN	
Examples	<i>Students with ASD (and co-morbid Intellectual Disability); Students with moderate to severe Intellectual Disability(with or without ASD).</i>
Educational Provisions	• Specialised curriculum (e.g., functional academics, life skills, vocational skills) according to the student's needs and ability. • Smaller-class sizes* with specialised in-class support. • Individualised education plan that is developed by teachers with inputs from allied health professionals and parents to meet the unique learning needs of students. • Additional specialised support in speech or occupational therapy. • Individualised behavioural support to address challenging behaviours, where necessary.

Severe SEN	
Profile	• Three or more aspects of adaptive functioning showing severe deficit (i.e. more than 3 standard deviations from the mean compared to same-aged peers, in terms of e.g., motor, daily living, communication skills). • Moderate to severe impairment in cognitive functioning (i.e. more than 3 standard deviations from the mean compared to same-aged peers in cognitive abilities). • Significant difficulties in accessing mainstream curriculum, presence of additional challenging behaviours**.
Examples	<i>Students with ASD (and co-morbid ID); Children with moderate to severe Intellectual Disability (with or without ASD); Cerebral Palsy (with co-morbid ID); Multiple Disabilities</i>
Educational Provisions	• Specialised curriculum (e.g., functional academics, life skills, vocational skills) according to the student's needs and ability. • Smaller-class sizes* with specialised in-class support. • Individualised education plan that is developed by teachers with inputs from allied health professionals and parents to meet the unique learning needs of students. • Additional specialised support in speech or occupational therapy, orientation and mobility training, where necessary. • Individualised behavioural support to address challenging behaviours, where necessary.

* Explanation for Class-Sizes

Class-sizes vary according to the different profiles and needs of the students in the respective SPED schools. In some cases, classes may be combined for selected curriculums or programmes, and in these cases, there would typically be more than one teacher in the class. In other cases, teacher aides may be deployed in classrooms to further support student needs. Overall, class-sizes in SPED schools may vary from 4 students to 15 students.

**** Explanation for Challenging Behaviours**

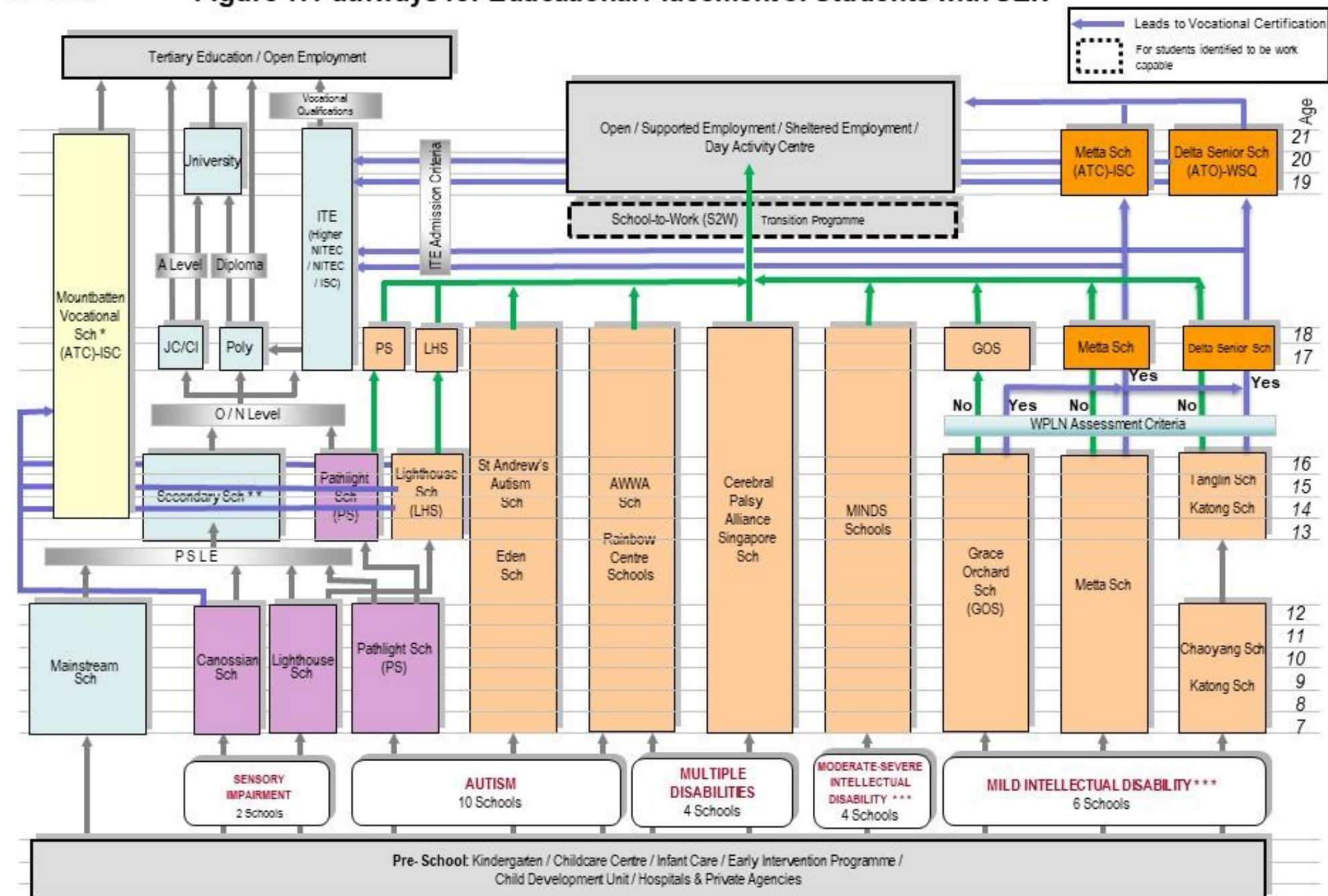
Challenging behaviours are behaviours exhibited by the student that are disruptive, destructive and dangerous (e.g., hitting others, property destruction, self-injurious behaviour). These behaviours are of such an intensity, frequency or duration, as to pose physical harm to themselves or others around them.

Challenging behaviours may be linked to developmental disorders (e.g., ASD, conduct disorder), psychiatric disorders (e.g., schizophrenia, mood disorders) and medical disorders (e.g., epilepsy).

Challenging behaviours usually have an underlying function or motive, including: a means of communicating needs more effectively; seeking social attention or preferred activities; avoiding difficult tasks and aversive situations; or the generation of sensory reinforcement in the form of auditory, visual, tactile, olfactory, and gustatory stimulation.

5.3 Pathways for Educational Placement of Students with Special Educational Needs

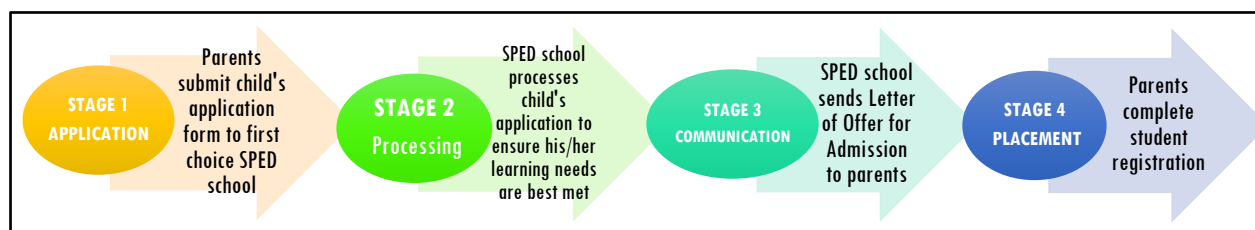
Figure 1 shows the current educational pathways available for students with SEN.

Figure 1: Pathways for Educational Placement of Students with SEN

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5.4 Admission to SPED Schools

The admission process comprises four key stages:



Stage 1: Application

Different SPED schools admit students at different times of the year and some of them may have more than one student intake per year. For more details of the individual school's student admission, please visit the school's website. All applications to SPED schools should be made using the standardised SPED School application form and submitted to the first choice SPED school.

The SPED School Application form has four sections. Each section can be completed separately and concurrently by the relevant parties before it is submitted to the first choice SPED school. The four sections are:

- Section I: To be completed by referring agency and parents
- Section II: To be completed by a teacher
- Section III: To be completed by a medical doctor
- Section IV: To be completed by a psychologist

When completing the form, you should also refer to Chapter 4 of an accompanying User Guide for the SPED School Application form. A soft copy of the User Guide can be downloaded from www.moe.gov.sg/docs/default-source/document/education/special-education/files/user-guide.pdf.

The application can only be processed if all required documents are received in order. Missing or inaccurate information may result in delays in processing of the application.

Stage 2: Processing

Applications are processed to ensure student's learning needs can be best met in the school.

If there is no vacancy in the first choice school, student's school placement in an alternative suitable school will be facilitated by the first choice school, taking into consideration school choices and available vacancies.

If the first choice school does not suit the child's SEN profile, the application will be referred to the Multi-Agency Advisory Panel (MAAP). The MAAP comprises of specialists and professionals from the Ministry of Education, government hospitals, SPED schools and the National Council of Social Service, who will make a recommendation based on the educational interest of the student.

Parents of children born after 1 Jan 2012 have to fulfil their Compulsory Education obligations by enrolling their children in the first choice school, if their child was successful in getting a place, or in the alternative suitable school. Parents are to ensure that their child regularly attends school and completes his / her 'primary' or 'junior' program in the respective school.

Stage 3: Communication

Parents will be informed of the outcomes of their applications. For all successful applications, parents will be notified by the first choice school through a Letter of Offer for admission.

Stage 4: Placement

Once parents have decided to accept the offer from the school, they must register their child at the school within two weeks from the day they receive the Letter of Offer to confirm the placement.

In some cases, it may be possible that the severity of a student's SEN may change over time (e.g., in response to intervention, as a result of degenerative conditions / mental health or other medical issues). On a case-by-case basis, parents can make an application to transfer their child to another more appropriate educational setting in consultation with the current school that the child is enrolled in. A re-assessment of the student's SEN may be required to reflect current functioning. It is important to consider the age of the student and availability of vacancies in the receiving school to ensure successful transfers.

5.5 Compulsory Education for Students with Moderate-to-Severe Special Educational Needs

Compulsory Education (CE) was implemented in Singapore in 2003 to provide for compulsory primary education.

With effect from 2019, all children with Special Educational Needs (SEN) born after 1st January 2012 will be included under CE. They must attend primary level education (or its equivalent) in Government-funded Special Education (SPED) schools or mainstream primary schools.

Students with moderate-to-severe SEN can fulfil the CE requirement by attending a Government-funded SPED school. It should be noted that the CE Act does not require all students with SEN to be enrolled in mainstream primary schools.

If parents wish to seek deferment from enrolling their child in a SPED school, they must submit their application to MOE. For more details, please refer to <http://www.moe.gov.sg/education-system/compulsory-education/deferment>.

If parents wish to apply for exemption from Compulsory Education (e.g., for home-schooling), they will need to submit their application to MOE. For more details, please refer to <http://www.moe.gov.sg/education/education-system/compulsory-education/exemptions>.

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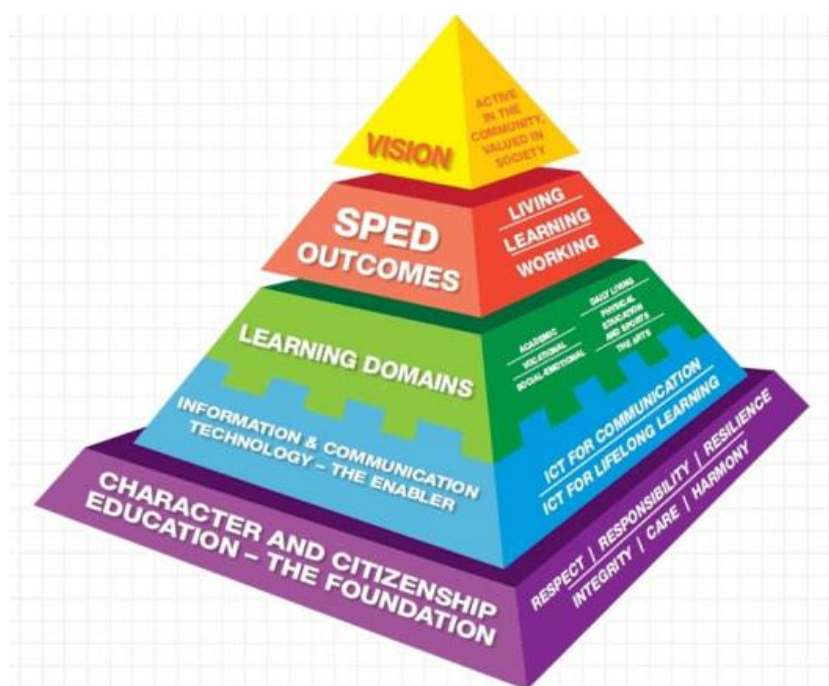
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Appendix

SPED Curriculum

All 19 SPED schools are guided by the SPED Curriculum Framework: 'Living, Learning and Working in the 21st Century' to design and deliver quality and holistic education for their students.

Released in 2012, the SPED Curriculum Framework sets a common direction for excellence in teaching and learning yet provides flexibility and space for the SPED schools to customise their curriculum to meet the unique needs of their diverse student profiles.



The framework articulates the vision for SPED, a set of core principles, and Living, Learning and Working (LLW) outcomes for every student at the end of their education. It also specifies a set of desired living, learning and working outcomes in six core learning domains (academic, social-emotional, daily living, vocational, the arts, physical education and sports) in a holistic way.

Finally, it affirms the importance of Character and Citizenship Education (CCE) as the foundation for a values-based SPED, and Information Communication Technology (ICT) as an enabler for teaching and learning.

Financial Assistance, Additional Information and School Fees

All SPED schools provide substantial financial support to students. All schools provide MOE Financial Assistance and Subsidy Schemes, such as the:

- SPED Financial Assistance Scheme
- School Meals Programme
- Public Transport Subsidy
- MOE Annual Grant for Discretionary Financial Assistance.

Additionally, students can benefit from the subsidy schemes administered by SG Enable, such as the Voluntary Welfare Organisation Transport Subsidy (<https://www.sgenable.sg/pages/content.aspx?path=/schemes/transport/vwo-transport-subsidies/>) and the Taxi Subsidy schemes (<https://www.sgenable.sg/pages/content.aspx?path=/schemes/transport/taxi-subsidy-scheme/>). There are also school-based financial assistance schemes unique to each school.

The next section shows the collated information on admission criteria, typical intake cycles, school programmes, support services and contact details of the SPED Schools. For information on the Open House dates of the SPED schools, please refer to respective school websites. Finally, readers are also advised to check the individual schools' websites for the most updated school fees.

Information on Special Education (SPED) Schools

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I. SPED Schools for Mild Intellectual Disability (including students with Autism Spectrum Disorder with comorbid Mild Intellectual Disability)

APSN Chaoyang School

Admission Criteria	<u>Age</u> - The student is between 7 and 12 years old (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosis of Mild Intellectual Disability (MID) - Applicants with ASD must: - Have a primary diagnosis of MID - Be diagnosed with ASD - The student should not have another significant sensory or physical disability that would require specialised supports that may not be available in an APSN school.
Typical Intake Cycles	Intake for All Levels - May apply throughout the year - Primary 6 applicants applying in the second semester of the school year will not be considered. Primary 1 Intake - Students applying into Primary 1 for the subsequent year are advised to send in their completed applications before end-of-June of the current year, otherwise they may not meet the January intake of the subsequent year. <i>Please note that admissions screening and class observations can only be conducted during the school term.</i>
Financial Assistance Schemes	<u>School-based Financial Assistance Schemes</u> Student-Welfare Fund
School Programmes	Module-based curriculum caters to different learning needs of students which includes Functional Academics (Literacy, Numeracy & Science), Life Skills (Self Help, Social Competence, Home Economics, Healthy & Safe Relationship), Aesthetics (Visual & Performing Arts) and Physical Education Promoting Alternative Thinking Strategies (PATHS) programme for developing social and emotional competencies

	• Co-Curricular Programme (CCA) caters to all Primary 1 to 6 students and is embedded during curriculum time • Talent Development Programme for Performing & Visual Arts (VPA) and Sports to hone students' talents in varied learning opportunities • Student Leadership Programme provides learning experiences to develop leadership potential progressively in various roles through the years
Support Services	Support Services for students Psychological Services, Social Work Services, Occupational Therapy Services and Speech & Language Therapy Services
Contact Details	Admission Officer Tel: 64566922 Email: cys@apsn.org.sg School Website: http://www.apsn.org.sg/

APSN Katong School

Admission Criteria	<u>Age</u> • The student is between 7-16 years old (based on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> • Diagnosis of Mild Intellectual Disability (MID) • Applicants with ASD must: - Have a primary diagnosis of MID - Be diagnosed with ASD • The student should not have another significant sensory or physical disability that would require specialised supports that may not be available in an APSN school.
Typical Intake Cycles	Monthly intake cycles
Financial Assistance Schemes	<u>School-based Financial Schemes</u> • Student-Welfare Fund
School Programmes	• Programme for Students with Mild Intellectual Disability • (For students aged 7-16 years)

	• Programme for Students with ASD • (For students aged 7-12 years) • Students are placed in a classroom setting where learning is fully maximised. There is sensory play and visual cues are used for communication and learning. • Voc-Ed Programme (For students aged 13-16 years) Work Exposure Programme Work Attachment Programme <i>In all the programmes above, Katong School offers a comprehensive curriculum in the area of functional academics (literacy and numeracy), social development and vocational education (for age 13 and above).</i>
Support Services	<u>Support Services for students</u> Psychological Services, Social Work Services, Speech Therapy services, Occupational Therapy Services. <u>Support Services for family</u> Family Matters @ School, Family-based intervention programmes, Workshops for siblings, Workshops for Parents on school matters.
Contact Details	Admission Officer – AP Support Officer Tel: 66430303 Email: ks@apsn.org.sg School Website: http://www.apsn.org.sg/

APSN Tanglin School

Admission Criteria	<u>Age</u> • The student is between 13 and 16 years old (based on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Diagnosis</u> • Diagnosis of Mild Intellectual Disability (MID) • Applicants with ASD must: - Have a primary diagnosis of MID - Be diagnosed with ASD • The student should not have another significant sensory or physical disability that would require specialised supports that may not be available in an APSN school.
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Typical Intake Cycles	Monthly Intake Cycles (1 st day of each month except June and December)
Financial Assistance Schemes	<u>School-based Financial Assistance Schemes</u> • Student-Welfare Fund (On top of MOE subsidy)
School Programmes	APSN Tanglin School provides a holistic and person-centered curriculum, working in collaboration with the home and community to educate the whole child. Information & Communication Technology is the key enabler to enrich and transform teaching & learning for students to attain the SPED Outcomes of Living, Learning and Working in the 21st century. Character & Citizenship Education is the foundation for a value-based special education that underpins all learning domains embracing the education of the students' heart, mind and hands. <u>Functional Academic Domains</u> • Literacy • Receptive and Expressive Language skills to build literacy for living, learning and working in a print-rich environment. • Numeracy Components of Arithmetic and Measurement to enable students to acquire mathematical concepts and skills for everyday life and life-long learning. • Science Inculcates the spirit of scientific inquiry in daily lives, society and environment. <u>Personal Social Domains</u> • Social Emotional Learning Equip students with the skills to recognize and manage emotions, develop care and concern for others, make responsible decisions, establish positive relationships and manage challenges. • Physical Education & Sports Train and provide students with skills and knowledge to lead active and healthy lives. • Visual & Performing Arts The Arts provides students the opportunities to explore their interest and demonstrate freedom of expression with an element of fun, while building character and value.

	• Co-curricular Activities (CCAs) Students discover their interests and talents through his/her participation in an array of CCAs while developing values and competencies to become active and responsible citizens and foster healthy connections with his/her peers, community and the society. <u>Vocational Education Domains</u> To enable students to understand and explore the World of Work, preparing them for further vocational education, training, work experience and independent living. • Food & Beverage • Horticulture & Floristry • Housekeeping & Hotel Accommodation Services • Retail Operations • Vocational Guidance
Support Services	<u>Support Services for students and family</u> Psychological Services, Social Work Services, Speech and Language Therapy Services, Occupational Therapy Services, One-to-one or group interventions to students and support for parents/ caregivers and staff
Contact Details	Head Allied Professional Tel: 6475 1511 Email: ts@apsn.org.sg Website: http://www.apsn.org.sg/

APSN Delta Senior School

Admission Criteria	<u>Age</u> - The student is 16 to 18 years old (as at 1st Jan) upon admission <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosis of Mild Intellectual Disability (MID) - Work Place Literacy Numeracy (WPLN) scores of at least: - Level 2 in Listening - Level 2 in Reading - Level 1 in Numeracy - Is assessed to possess adequate level of work readiness (this includes work attitude, work habits, interpersonal and communication skills, self-management, etc.) - Has demonstrated at least 95% attendance and punctuality in the last 12 months of his/her sending school - Has not committed any major offences in the last 12 months of his/her sending school - At the time of admission to a school, the student should be physically mobile
Admission Period	Yearly intake cycles in January
Financial Assistance Schemes	<u>School-based Financial Schemes</u> Needy Student Fund - Financial assistance (e.g., transportation subsidy, medical treatment, spectacles etc.) are available for students who not eligible for SPED FAS on a case by case basis.
School Programmes	<u>Academic Programmes:</u> Literacy, Numeracy, Character and Citizenship Education, Fitness and Health <u>Vocational Programmes leading to Workforce Skills Qualification (WSQ) Certification</u> Horticulture Retail Operations Hotel & Accommodation Services Food Services (Culinary, Pastry, Service) <u>LEAD Programme (Non-certification)</u> - Work Skills Training - Life Skills Training

	• Computer Skills Training
Support Services	Support Services for students Psychological Services, Social Work Services, Occupational Therapy Services and Speech & Language Therapy Services
Contact Details	Admission Officer Tel: 6276 3818 Email: dss@apsn.org.sg School Website: http://www.apsn.org.sg/

Grace Orchard School

Admission Criteria	<u>Age</u> • The student is between 7 and 16 years old (based on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> • Diagnosis of Mild Intellectual Disability (MID) • Applicants with ASD must: - Have a primary diagnosis of MID - Be diagnosed with ASD • The student should not have another significant disability, which may affect their ability to cope within the context of a school for Mild Intellectual Disability. At the time of admission to the school, the student should be physically mobile and have been assessed to be able to benefit from our school's MID curriculum.
Typical Intake Cycles	January & July
Financial Assistance Schemes	<u>School-based Financial Schemes</u> • Further Transportation subsidy over and above MOE and Sg Enable (Public and School bus) • Other financial assistance (e.g., medical treatment, books, enrichment programme etc.) are available on a case-by-case basis

School Programmes	The school has two main programmes: • The MID Programme • The ASD Programme <i>(There is a structured and supported process for students assessed to be ready for integration to transit them from an ASD programme to the MID programme.)</i> There are two distinct levels in the school: • <u>The Junior Level (7-12 year olds)</u> In the Junior levels, foundations are built in the learning domains of Social-Emotional, Academic (English, Mathematics and Science), Daily Living, Arts as well as Physical Education through the use of evidence-based strategies. • <u>The Senior Level (13-18 year olds)</u> The Senior levels build on these foundations to prepare our students in pre-vocational skills such as career guidance and work-readiness skills required for post-school life. The Universal Design for Learning (UDL) framework is used for the planning of all teaching and learning in the school. Co-curricular activities are offered to all students during curriculum hours in the following areas, Sports, Performing Arts, Uniform Groups and Clubs. Camps, Overseas trips, Values in Action projects are held annually to undergird the explicit teaching with the school values. The Pastoral Care Programme engages our youth in meaningful and safe after-school activities typically held within a specially designed space called the 'Youth Hub'.
Support Services	<u>Support Services for students</u> Psychological Services, Social Work Services, Speech and Language Therapy Services, Occupational Therapy Services, Art Therapy Services, Job Placement & Support Services. <u>Support Services for family</u> Family based intervention programme, Parenting workshops, Parent Network Group
Contact Person(s)	Allied Professional Associate Tel: 6561 9128 Email: info@go.edu.sg School Website: http://www.go.edu.sg/

Metta School

Admission Criteria	<u>Age</u> • The student is between 7 and 16 years old (based on year of birth) upon admission. • For Vocational Programme, the student is between 17 and 18 years old (based on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> • Diagnosis of Mild Intellectual Disability (MID) • Applicants with ASD must: - Have a primary diagnosis of MID - Be diagnosed with ASD • Applicants do not have a significant physical disability that will limit his/her access to the school programmes. <u>Additional criteria for admission to Vocational Programme</u> • The applicant must achieve a Level 2 in WPL-Reading, a Level 2 in WPL-Listening and a Level 1 in WP-Numeracy prior to his/her application.
Admission Period	<u>For MID and ASD Programmes</u> Monthly intake from January to September <u>For Vocational Programme</u> Yearly intake in January. <i>Application documents are to be submitted 5 months before the commencement of vocational training in January each year.</i>
Financial Assistance Schemes	<u>School-based Financial Assistance Scheme</u> • Transportation subsidy (Public and School bus) • Other financial assistance (e.g., uniform, stationery and grocery) are available on a case by case basis
School Programmes	<u>Autism Spectrum Disorder (ASD) Programme</u> • Caters for students with ASD between the ages of 7 and 18 years. • Small class size. • Structured teaching – physical structure, scheduling, work system, routines and visual supports – is adopted to create a conducive environment to enhance learning.

	<u>Basic (B) Programme</u> • Caters for students with mild intellectual disability between the ages of 7 and 12 years. • Equips them with good foundation of literacy, numeracy and basic science concepts. • Develops their independent living skills, inter @ intra-personal skills, personal health and fitness with Character & Citizenship Education (CCE) as the foundation. <u>Career (C) Programme</u> • Caters for our students between the ages of 13 and 16 years. • Offers Workplace Literacy and Numeracy, Home Economics, Physical Education, Performing & Visual Arts, Vocational Education and Guidance. • Students participate in short-term on-the-job training inside and/or outside school. <u>Vocational (V) Programme</u> • Caters for students between the ages of 17 and 21 years. • Provides training leading to nationally recognized vocational certification, i.e. ITE Skills Certificate (ISC). • Students are offered skills training in ISC Baking, ISC Food Preparation or ISC Housekeeping Operation (Accommodation) in the first two years of the programme. Upon meeting the requirements for advanced level studies, students will progress to another two years of training in ISC Baking Practices or ISC Hospitality Services. • Upon successful completion of the programme and acquisition of required WPLN standards, students are eligible to apply for admission to NITEC programmes. <u>Employment Pathway Programme (EPP)</u> • Caters for students between the ages of 17 and 18 years. • Trains students in non-certification track for smooth transition from school to work upon graduation at age 18. • Offers basic level vocational skills training, such as WSQ Perform Basic Cleaning of Hard Floor Surfaces, WSQ Basic Food Hygiene Course and on-the-job training. • Upon graduation, SG Enable will support these students in pathways identified based on suitability and capabilities of students. (S2W) Metta students will participate in weekly Performing and Visual Arts (PVA) activities.
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Support Services	<u>Support Services for Students</u> Psychological Services, Social Work Services, Speech Therapy Services, Occupational Therapy Services, Job Placement & Support Services. <u>Support Services for Family</u> Parenting skills workshops.
Contact Person(s)	Psychologist Tel: 6788 5800 Email: enquiry@mettaschool.edu.sg School Website: www.mettaschool.edu.sg/

**II. SPED Schools for Moderate to Severe Intellectual Disability
(including students with Autism Spectrum Disorder with comorbid moderate to severe Intellectual Disability).**

MINDS (Fernvale Gardens School, Lee Kong Chian Gardens School, Towner Gardens School, Woodlands Gardens School)

Admission Criteria	<u>Age</u> • The student is between 7 and 18 years of age (based on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> • Diagnosis of Intellectual Disability (ID) • Diagnosis of ASD • At point of admission, student should be ambulatory <u>Please send all applications to:</u> Central Referral Coordinator MINDS Headquarters 800 Margaret Drive, Singapore 149310 Tel: 6479-5655 Fax: 6479-0706
Typical Intake Cycles	January, March and July (throughout the year)
Financial Assistance Schemes	<u>School-based Financial Schemes</u> • Donations and food rations are available for families on a case by case basis • Assistance can be sought from Social Work Department
School Programmes	Programmes: • Junior Programme (7 to 12 years) • Senior Programme (13 to 18 years) • Special Programme (across all ages for those who need high support) Curriculum: Content for all programmes include: • English Language • Mathematics • Health Education • Social Competency Skills • Domestic Science • Physical Education • The Arts/Music

	• Science • Vocational Training (13 to 18 years old) Senior Programme will also include vocational preparation with work attachments for transition to after school services and open employment. Work ready students are referred to the School-To-Work Programme. <i>Students in the Senior Programme work towards obtaining WSQ - Statements of Attainment in modules such as Food Hygiene Food Hygiene, Interacting with Guests and Perform Basic Cleaning of Hard Floor Surfaces.</i> MINDS Schools offer structured classrooms and curriculum to support students diagnosed with Autism Spectrum Disorder through the use of work systems, schedules, routines and visual supports to create a conducive environment to enhance learning. Co-Curricular and Enrichment Activities offered include: • Uniform groups- Scouts, Brownies and Girl Guides • Sports • ICT Club • Music, Dance and Drama • Art and Craft • Green Club • Modular activities like educational trips, rock wall climbing, camping, etc.												
Support Services	<u>Support Services for students</u> • Psychological Services, Social Work Services, Speech & Language Therapy Services, Physiotherapy and Occupational Therapy Services. <u>Support Services for family</u> • Caregiver Support Initiative												
Contact Person(s)	Principal or Social Worker of the respective schools. Contact Numbers and emails: <table><tr><td>Fernvale Gardens School</td><td>64816697</td><td>fgs@minds.org.sg</td></tr><tr><td>Lee Kong Chian Gardens School</td><td>64738332</td><td>lgs@minds.org.sg</td></tr><tr><td>Towner Gardens School</td><td>64462612</td><td>tgs@minds.org.sg</td></tr><tr><td>Woodlands Gardens School</td><td>64680566</td><td>wgs@minds.org.sg</td></tr></table> Schools Website: http://www.minds.org.sg/SPED.html	Fernvale Gardens School	64816697	fgs@minds.org.sg	Lee Kong Chian Gardens School	64738332	lgs@minds.org.sg	Towner Gardens School	64462612	tgs@minds.org.sg	Woodlands Gardens School	64680566	wgs@minds.org.sg
Fernvale Gardens School	64816697	fgs@minds.org.sg											
Lee Kong Chian Gardens School	64738332	lgs@minds.org.sg											
Towner Gardens School	64462612	tgs@minds.org.sg											
Woodlands Gardens School	64680566	wgs@minds.org.sg											

III. SPED Schools for Multiple Disabilities

Cerebral Palsy Alliance Singapore School (CPASS)

Admission Criteria	<u>Age</u> • The student is between 7 to 18 years old (base on year of birth) upon admission. <u>Nationality</u> • Singapore Citizens will be given priority for admission • Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> • The school accepts students diagnosed with multiple disabilities (such as Cerebral Palsy, Global Developmental Delay, GDD but not Autism Spectrum Disorder, ASD). • An initial assessment will be conducted by the school personnel and the Allied Professionals (APs). • The admission of the child to school will depend on the availability of the class placement in the suitable educational programme.
Typical Intake Cycles	Admission will be done on a case by case basis.
Financial Assistance Schemes	<u>School-based Financial Scheme</u> • Additional financial assistance schemes are available on a case by case basis • Assistance can be sought from Social Work Department for any other financial schemes
School Programmes	All students at CPASS are guided by the Special Education Curriculum Framework which charts meaningful learning outcomes for living, learning, and working, by the end of their 12 years of special education. Six core Learning Domains have been identified: Academic (Language, Numeracy, and Science), Social-Emotional, Daily Living, Physical Education and Sports, the Arts and Vocational, tapping on Information Communication Technology as an enabler to ensure that students receive a comprehensive and holistic education in CPASS. Character & Citizenship Education is also a core part of our daily curriculum to impart the right values to the students. Students can participate from a range of CCAs besides other scheduled enrichment activities.

	Students at CPASS are separated by age into 2 levels – • Junior Levels (age range from 7 years to 12 years) • Senior Levels (age range from 13 years to 18 years) They are offered 3 educational programmes at CPASS – • High Support Programme (students with moderate to high support needs) • Functional Programme (Students with mild to moderate support needs) • Academic Programme (Students with mild support needs, higher cognition level and display ability to handle demands of mainstream curriculum.) A Trans-Disciplinary (Trans-D) Approach is adopted for the above 3 key educational programmes. The Trans-D Approach aims to enhance holistic and comprehensive development in the students by adopting a common view on the educational needs, a consensual commitment for consistent and integrated planning & implementation. It also provides more opportunities for professional exchange of knowledge and skills between the teachers and APs. All students are assured promotional transfers from junior levels to senior levels. Lateral transfers between programmes are at school's discretion and from students' assessment outcomes, where applicable.
Support Services	Students of the school are supported by a network of APs from occupational therapy, physiotherapy, speech and language pathology, social work and psychology. There are 7 specialized clinics namely Sensory Integration Clinic, Seating Clinic, Neurodevelopmental Treatment Clinic, Hand Clinic, Feeding and Swallowing Clinic, Audiology Clinic and Assistive Technology Clinic. A School Nurse is available to meet the daily health needs of the students and she is supported by a team of visiting doctors and dentist who attend to the medical needs of the students on a regular basis.
Contact Person(s)	Social Worker at CPAS Social Work department Tel: 6585 5617 E-mail: cpasschool@cpas.org.sg School Website: http://www.cpas.org.sg/

IV. SPED Schools for Multiple Disabilities or Autism Spectrum Disorder (Moderate to Severe SEN)

AWWA School

Admission Criteria	<u>Age</u> - The student is between 7 and 16 years of age (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosis of Multiple Disabilities (MD) or - Diagnosis of Autism Spectrum Disorder (ASD) <u>Other requirements</u> - All diagnosis for MD are to be supported by a medical report. - All diagnosis of ASD are to be supported by a diagnostic report.
Admission Period	Monthly intake cycles, except June and December holidays.
Financial Assistance Schemes	<u>School-based Financial Schemes</u> - School fees subsidy (Case by Case basis) - Transportation subsidy (School bus)
School Programmes	Other than a structured academic and no-academic curriculum and CCA program, the school constantly explores collaboration opportunities with stakeholders to expose our students to different platforms in the community that they could participate in and have richer learning experiences. This enables students to develop, as well as generalise and adapt their skills learnt. AWWA School aims to maximise the potential of its students to lead dignified and independent lives. We embarked on the School-to-Work (S2W) Transition Programme to give our students greater support to move on to the workplace thus increasing the chances of positive post-school outcomes for students and their families.

Support Services	<u>Support Services for students</u> Psychological Services, Social Work Services, Speech Therapy Services, Physiotherapy Services, Occupational Therapy Services, Music therapy, Full-time nurse <u>Support Services for family</u> Family based intervention programme, Workshops for siblings
Contact Person(s)	School Social Work Department Tel: 6511 5280 (School Main Line) Email: school@awwa.org.sg

Rainbow Centre Schools (Margaret Drive School, Yishun Park School and Yishun Park School (Woodlands Campus))

Admission Criteria	<u>Age</u> - The student is between 7 to 18 years old (based on year of birth) upon admission <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Applicant with a diagnosis of Autism Spectrum Disorder (ASD), which is supported by a diagnostic report, dated within 2 years from submission of application; OR - Applicant with multiple disabilities, which may be a combination of impairments in cognition, motor and sensory functions. This is supported by the completed medical and psychologist reports, dated within 2 years from date of submission. <u>Other requirements</u> - Admissions assessment - Availability of places in each of the campuses
Admission Period	Application opens 1 February for students applying for Junior 1 (7 years old) of the following year. Applications for places in other levels are accepted throughout the year. Admission to the Rainbow Centre Schools is through a Centralised Admissions Exercise. From July 2018, Rainbow Centre Schools will operate from 3 campuses:

	• Margaret Drive Campus - For students with ASD and Multiple Disabilities • Yishun Park Campus - For students with ASD and Multiple Disabilities • Yishun Park Campus (Woodlands) - For students with ASD
Financial Assistance Schemes	<u>Rainbow Centre Financial Schemes</u> • School fees subsidy • Transportation subsidy (School bus)
School Programmes	The Rainbow Centre Schools aim to nurture young persons with disabilities into adults who are able to live independently and interdependently, learn to grow continuously, and engaged in active participation and contribution to the community. The programme is based on an outcomes-based functional curriculum, that balances a common core curriculum to develop critical skills, and a personalised curriculum, that attends to more unique learning needs. This is facilitated by a teaching team and supported by a multidisciplinary therapy team to enable students to access their educational goals. The RC Curriculum adopts a 4-4-4 programme structure with differentiated and developmentally-appropriate focuses for each programme: <u>Junior Programme (7-10 years old):</u> Foundational knowledge and skills for self-care and management, and access to learning. <u>Middle Programme (11-14 years old):</u> Self-discovery, social Interactions & discovering the world as an emerging teen. <u>Senior programme (15-18 years old):</u> Transition to community and work as a young adult.
Support Services	<u>Support Services for students and family</u> Special Student Care Centre (at MDS) Family Life Services Family Empowerment Programme Student Dental Services
Contact Person(s)	Admissions Manager Tel: 64727077 Email: school.admission@rainbowcentre.org.sg School Website: http://www.rainbowcentre.org.sg/

V. SPED Schools for Autism Spectrum Disorder

Pathlight School

Admission Criteria	<u>Age</u> - Student is between 7 and 16 years of age (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE - In accordance to these terms and conditions, Singapore Permanent Residents (PR) and Foreigners will be served only if there are no Singapore Citizen children with special educational needs on the waiting list. <u>Profile</u> - Diagnosis of ASD - Adequate non-verbal cognitive abilities, verbal and literacy skills, to access the language demands of the Singapore mainstream academic curriculum - Joint attention skills to access learning in a structured group learning environment of 8-12 students <u>Other requirements</u> - Adequate self-help skills - No behavioural challenges or co-morbid conditions that will disrupt group learning or pose significant safety concerns for the individual and others. <i>Applicants who meet identified criteria are required to attend a screening assessment to ascertain suitability.</i>
School Screening Assessments	June, September, October, November
Admission Period	January, *March, *July *Screening assessments and admissions are conducted pending available vacancies for different cohorts.
Financial Assistance Schemes	<u>School-based Financial Schemes</u> - School fees subsidy and bursary for school-related expenses - Additional financial assistance schemes are available on a case by case basis
School Programmes	<u>Academic Programmes</u> <u>Primary 1 Foundation</u>

	• Customised 1 year programme to bridge gaps in academics and build readiness to learn skills for Primary 1 mainstream curriculum. <u>Primary and Secondary School Programme</u> • Follows mainstream academic curriculum leading to PSLE and GCE O- & N-level qualifications • Specialised courses in IT & Design skills • Incorporates non-academic periods and learning opportunities to develop leisure and life readiness skills in the areas of: - work habits and organisation, - self-management and regulation, - social and communication skills • Transition planning for post-secondary institutions/career pursuits <u>Unique Features for Secondary School Programme</u> • 5-year Secondary School programme for NT students (with 2-year graduation programme) incorporating academic and life skills for post-secondary institutions. • Compulsory Satellite School Model for ALL Secondary School students, endorsed by MOE. Students transit daily to classrooms based in mainstream secondary schools (Yio Chu Kang Secondary School, Peirce Secondary School and Mayflower Secondary School) to facilitate increased opportunities for purposeful integration. <u>Vocational Track (not open for application)</u> • This track is reserved for existing Pathlight students who are not able to continue pursuing the mainstream academics due to their ASD needs - Modified academics - Vocational training, leading to nationally certifiable courses - Life readiness skills
Support Services	• Literacy Remediation Programme for students (Primary school) with specific challenges • Positive Behaviour Supports • Support for exam and test-taking, including formal assessment and application to Singapore Examination Assessment Board for students' National Examination Access Arrangements • Transition planning and support for school leavers • Artist Development Programme for students with artistic talents

Contact Person(s)	Student Affairs Email: queries@pathlight.org.sg Tel: 6592 8925 School Website: http://www.pathlight.org.sg/
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VI. SPED Schools for Autism Spectrum Disorder (Moderate to Severe SEN)

Eden School

Admission Criteria	<u>Age</u> - The student is between 7 to 14 years old (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosis of Autism Spectrum Disorder Please refer to the school's website: http://edenschool.edu.sg/admissions/application.php for information on the documents and reports to be submitted with the application.
Typical Intake Cycles	- Major intake in January, staggered intakes for the rest of the year subject to availability of vacancies - For admission in the new academic year, school screening assessments are conducted in June and September of the preceding year
Financial Assistance Schemes	<u>School-based Financial Schemes</u> Eden Financial Assistant Schemes (Case by Case basis)
School Programmes	<u>School Programmes and Educational Tracks</u> Eden School (ES) provides a quality autism-friendly education for children and youth with autism spectrum disorder. Most of the students have co-morbid condition of intellectual disability. Research indicates that basic life skills are crucial to long-term independence. The teaching of functional academics, daily living, social communication, leisure and vocational skills are carried out by a team of dedicated professionals. With careful instruction and evidence-based practices, students acquire appropriate skills that

	enable them to participate actively and meaningfully in home and community settings. Each student has an individual profile that documents his/her preferences, interests, needs and strengths. With this information, individualized education plans are developed, and class environments structured to cater to the differentiated learning needs of the students. Students are grouped in two tracks: <u>Junior Years (7 – 12 years old)</u> The focus is on the teaching of foundational core skills. Subjects include Work Habits, Communication, Social Skills, Literacy, Numeracy, Gym, PE and Art. <u>Senior Years (13 – 18 years old)</u> Foundational core skills are practised in authentic vocational and community settings, in preparation for transition to employment or day activity centres. Additional subjects include General Vocation and ICT. Students with employability potential learn both hard and soft skills at Food Preparation, Environmental Cleaning and Office worksites.
Support Services	Autism Therapists, Occupational Therapists, Speech Language Therapist support (classroom based)
Contact Person(s)	Ms Denise Zheng Administrative Executive (Student Affairs) Email : student.affairs@edenschool.edu.sg Tel : 62657400 School Website: http://www.edenschool.edu.sg/

St Andrew's Autism School

Admission Criteria	<u>Age</u> - The student is between 7 and 14 years of age (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosis of Autism Spectrum Disorder (ASD) - Ambulant
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Admission Period	January, April and July
Financial Assistance Schemes	<u>School-based Financial Schemes</u> • School- based financial assistance scheme for those who are unable to qualify for SPED FAS Scheme • Transportation Subsidy (Public bus)
School Programmes	Customised Curriculum Customised curricula emphasising social-emotional learning, communication, functional literacy and numeracy, daily living skills and vocational skills. Students are provided opportunities to participate in community initiatives and collaborative programmes with external partners to further enhance their communication and social interaction skills. Integrated Programmes Expressive arts, adaptive physical education, and Co-curricular Activities enhance the holistic development of students. In community-referenced learning, students practise functional academic, social and communication skills as well as acquire generalisation skills and confidence to foster a sense of independence, autonomy and dignity. <u>Vocational Programme</u> • MOE's School2Work Programme • With school vocational programme
Support Services	<u>Support Services for Students</u> Psychological Services, Social Work Services, Speech Therapy, Occupational Therapy, Music Therapy and Job Placement and Support <u>Support Services for Families</u> • Parent Support Group (PSG) - Workshops for parents/caregivers/siblings - Family-empowering overseas trips • Family-based interventions - Counselling - Case conferences - Home visits • Orientation programme for parents of new students
Contact Person(s)	Admissions Office/Administrative Executive Phone: 6517 3810 Email: admissions@saac.org.sg School Website: http://www.saac.org.sg/

VII. SPED Schools for Sensory Impairment

Canossian School

Admission Criteria	<u>Age</u> - The student is between 7 and 14 years of age (based on year of birth) upon admission <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Diagnosed to have a hearing loss as the primary disability hearing impairment - Assessed by a certified psychologist to be able to access the national curriculum for mainstream schools
Typical Intake Cycles	Throughout the year, typically before the start of a new semester
Financial Assistance Schemes	<u>School-based Financial Scheme</u> - Canossian School Financial Assistance Scheme - Transportation subsidy (School bus)
School Programmes	- Mainstreaming Programme (in partnership with mainstream schools: Canossa Convent Primary School and Macpherson Primary School) - Support Programme (customised learning programme to enable facilitate the inclusion of pupils in mainstream kindergarten and primary schools) - Individual Conversation (teachers engage each student in a 10-minute conversation at a frequency determined by the needs of the student to reinforce the development of listening, spoken language and interactive skills) - Speech Therapy for identified students to build their oral and aural skills - Parent Guidance Programme (build the capacity of parents to work with the child) - Co-curricular Activities (all students will participate in one of the 4 CCAs which are Percussion Band, Choir, Art Club and Environmental Club)
Support Services	<u>Support Services for students</u> - On-site audiological and technical services - Habilitation services - Speech therapy services
Contact Person(s)	Senior Manager / Admissions Mrs Doris Ang Tel: 67498971

	Email: doris@canossian.edu.sg School Website: http://www.canossian.edu.sg/
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Lighthouse School

Admission Criteria	<u>Age</u> - The student is between 7 and 18 years of age (based on year of birth) upon admission. <u>Nationality</u> - Singapore Citizens will be given priority for admission - Singapore PRs and foreign students can apply for admission subject to vacancy availability and terms and conditions of MOE <u>Profile</u> - Visual Impairment: the applicant must be certified visually-handicapped by a registered ophthalmologist-in-practice. or - Hearing Loss: the applicant must be certified hearing-impaired by a registered ENT specialist doctor.
Admission Period	January & July
Financial Assistance Schemes	<u>School-based Financial Schemes</u> Lighthouse School's Students' Welfare Fund (for transport and meal subsidies)
School Programmes	<u>Mainstream Curriculum</u> The school offers students with VI or HL, who are cognitively able to access mainstream academics, mainstream primary level curriculum and prepares them for the Primary School Leaving Examinations (PSLE). Students who are successful in the PSLE continue their education in designated mainstream secondary schools. <u>Customised Curriculum Programme</u> Students with VI or HL coupled with MID and/or have additional special needs attend a customised programme, which focuses on life skills and pre-vocational skills.
Support Services Available	<u>Support Services for student</u> - Occupational Therapy - Speech Therapy <u>Support Services for Family</u> - Talks/Workshops
Contact Details	Administration Executive Tel: 6250 3755 Email: lighthouse@lighthouse.edu.sg School Website: http://www.lighthouse.edu.sg/

Workgroup Members

Chair and Vice-Chairs

Dr Sharifah Mariam Aljunied (Chairperson)
Principal Educational Psychologist
Special Educational Needs Division
Ministry of Education

Assoc. Prof Lourdes Mary Daniel (Vice-Chairperson)
Head of Department and Senior Consultant
Department of Child Development
KK Women's and Children's Hospital

Dr Chong Shang Chee (Vice-Chairperson)
Head and Senior Consultant
Child Development Unit
National University Hospital
Assistant Professor, Yong Loo Lin School of Medicine

Ministry of Education (Special Educational Needs Division)

Dr Chong Suet Ling
Principal Educational Psychologist
Special Education

Dr Choi Pui Meng
Senior Educational Psychologist

Dr Ang Ying Ying
Senior Educational Psychologist

Dr Loretta Loke
Educational Psychologist

Ms Wong Geok Mei
Senior Inspector

Ms Lisa Goh Chai Shuen
Special Education Officer

National University Hospital

Ms Ng Siau Hwei
Senior Psychologist
Paediatric Psychological Services
Department of Paediatrics

Dr Mythra Mahesh
Principal Speech Therapist
Child Development Unit
Department of Paediatrics

Ms Lynn Lim Wen Xin
Senior Speech Therapist
Department of Rehabilitation

Ms Emily Koh Tse Hui
Senior Occupational Therapist
Department of Rehabilitation

Ms Helen Chandler
Senior Speech Therapist
Department of Rehabilitation

KK Women's and Children's Hospital

Dr Faye Yang Phey Hong
Senior Principal Psychologist
Department of Child Development

Dr Sylvia Choo Henn Tean
Senior Consultant
Department of Child Development

Ms Goh Siew Li
Head, Speech Language Therapy
Service
Principal Speech Therapist

Institute of Mental Health

Ms Pearl Lock Shern Xi
Senior Clinical Psychologist
Department of Developmental
Psychiatry

Community Psychology Hub

Dr Melanie Chan
Principal Psychologist and Assistant
Director (until June 2018)

National Council of Social Service

Ms Chia May Ling
Deputy Director
Service Planning & Standards
Service Planning & Funding Group

Special Education Schools

Dr Kelvin Lee
Clinical Head, Psychology
AWWA School

Ms Yvonne Leung Sau Ying
Senior Social Worker
Movement for the Intellectually
Disabled of Singapore

Ms Teng Shu Qing Jocelyn
Psychologist
Grace Orchard School

Ms Serene Chen
Educational Psychologist
St. Andrew's Autism School

Mrs Patricia Cheng
Vice Principal /
Autism Consultant
Eden School

Ms Alina Chua
Principal Autism Consultant
Pathlight School

Ms Jovial Teo
Psychologist
Association for Persons with
Special Needs

Ms Elangovan Bhavani
Senior Occupational Therapist
AWWA Allied Health
Professional Group

Mr Leonard Lau
Head, Allied Health Department
Metta School

Ms Susan K. George
Principal Psychologist
Rainbow Centre

Special Education Schools (cont.)

Ms Doris Ang
Senior Manager
(Canossian Admissions &
Audiological / Habilitation)
Canossian School

Ms Ni Ni Swe
Senior Physiotherapist
Cerebral Palsy Alliance Singapore

Resource Persons

Assoc. Prof. Poon Kin Loong Kenneth
Centre Co-Director
Centre for Research in
Child Development
National Institute of Education
Nanyang Technological University

Assoc. Prof. Yeo Lay See
Psychological Studies Academic
Group
National Institute of Education
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Dr Lohsnah Jeevanandam
Senior Lecturer &
Placement Co-ordinator
Department of Psychology
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Secretariat

Mr Timothy Rushil Singham
Associate Psychologist
Special Educational Needs Division
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Mr Tan Jun Xian
Associate Psychologist
Special Educational Needs Division
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