Training Course Manual

"Holistic Approach to Improving Children with Developmental Delay"

Rajanagarindra Institute of Child Development
Department of Mental Health, Ministry of Public Health

Contents

Training Course Syllabus

Course Title: Holistic Approach to Improving Children with Developmental Delay

Course Description: This course is an integrated principles and experiences of holistic approach to improving children with developmental delay. Appropriate field observations and experiences are an integral part of this course and will be integrated during the course content.

Course Objectives:

The trainees will:

1. Demonstrate knowledge of developmental assessments of children
2. Identify children at risk/developmental delay and make suitable early intervention
3. Use knowledge of how children differ in their development and approaches to improving children with developmental delay.

Learning Outcomes:

1. Gain a better understanding of children with developmental delay
2. Gain an understanding of how to assess children with developmental delay, give appropriate intervention and make suitable referrals.

Target Audience:

1. Medical multidisciplinary team include physiotherapist, occupational therapist, speech pathologist, psychologist, nurse, etc.
2. Medical resident/physician

Number of trainees: 10 – 15

Methods of Instruction: A variety of instructional methods in this course may include lectures from the instructor, demonstrations, presentations, and practicum. In addition, trainees will be required to complete a field-based observation in Rajanagarindra Institute of Child Development (RICD)/Rajanukul Hospital focusing on children with developmental delay.

Assessment Methods: A variety of assessment methods will serve to evaluate comprehension and application of the concepts and skills outlined in the course objectives.

Evaluation of Course Competencies:

1. Regular class attendance 5 points
2. Participation in class discussion and activities 5 points
3. Assignments
    - 3.1 Group Experience Summary Report – 15 points
      Should be completed by the last week of training course.
    - 3.2 Group Project Proposal 15 points
      Should be completed by the last week of training course.
    - 3.3 Group Presentation – 10 points
      Presentations will be on the last week of training course.
4. Exam – 50 points
5. Minimum of points 75%

All assignments are expected to be on time.
All exams need to be taken on the scheduled date.

Course time: Mon – Fri, 9.00 a.m. – 4.00 p.m.

Duration of the course: 95 hours

Location

1. Main location:
   Rajanagarindra Institute of Child Development (RICD)
   196 Moo 10, Donkaew, Maerim, Chiang Mai, Thailand 50180
2. Field-based observation location (elective course)
   Rajanukul Institute, Dindaeng Rd., Dindaeng District, Bangkok, Thailand 10400

Communication Policy:

Electronic communication between instructor/manager and trainees in this course will utilize the email systems. The program has a Facebook page, Line group, this communication will be used to keep trainees up-to-date on program activities, and announcements.

Facebook

Line Group

Google Drive

Course Overview

Pre-training

1. Pre-examination training (150 minutes)
2. Course orientation (30 minutes)
   by Ms.Saowalak Langgapin
3. Introduction to RICD & field visit around RICD (120 minutes)
   by Ms.Preechaya Phrommin & Ms.Pakpimintra Waratchayathon
4. Guide to living in Chiang Mai (60 minutes)
   by Mr.Takkin Teriyapirom
5. Welcome dinner

Content	Duration (hour)	
	Medical multidisciplinary team	**Medical Resident**
Module I Surveillance, Screening, Evaluation, Diagnosis, and Early Intervention ***(****core course****: require to complete)***	**30**	**30**
Lesson I Thai Child Developmental System Model Speaker: Dr.Samai Sirithongthaworn Deputy Director General Department of Mental Health	3	3
Lesson II Children with Developmental Delay and Neurodevelopmental Disorders Speaker: Dr.Doungkamol Tangwiriyapaiboon Medical Staff Organization	3	3
Lesson III Surveillance, Screening, Evaluation, and Early Intervention 1. Developmental Surveillance and Promotion Manual: DSPM (6 hours) Speakers: 1. Ms.Amara Thanasupaputana 2. Ms.Atchara Choomputhan 2. Developmental Assessment for Intervention Manual: DAIM (6 hours) Speakers: 1. Ms.Suphakphimon Papang 2. Ms.Chayanit Anantaworawong 3. Thai Early Developmental Assessment for Intervention: TEDA4I (12 hours) Speakers: 1. Ms.Chulaphorn Somchai 2. Ms.Wisalinee Veyrudit 3. Ms.Noppawan Bautong Nursing Department	24	24

Content	Duration (hour)	
	Medical multidisciplinary team	**Medical Resident**
Module II Treatments ***(****core course****: require to complete)***	**23**	**23**
Lesson I Pediatric Physical Therapy in Children with Motor Development Problems Speaker: Ms.Ngamphan Chitmin Department of Physical Therapy	3	3
Lesson II Early Stage Development and Postural Support Device Uses Speaker: Mr.Joey Tell RICD Wheelchair Project	3	3
Lesson III Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder Speakers: 1. Ms.Preechaya Phrommin 2. Ms.Chadaporn Sornjai Department of Thai Traditional Medicine	3	3
Lesson IV Sensory Integration and Snoezelen Speakers: 1. Mr.Krugchai Pichai 2. Ms.Jiraporn Thungtanaopakun Department of Occupational Therapy	3	3
Lesson V Applied Speech Therapy for Children with Autism Speaker: Ms.Pornpiriya Apirajeeranan Department of Speech Therapy	1	1
Lesson VI Augmentative and Alternative Communication, for AAC, Children with Complex Communication Needs Speaker: Ms.Nicole Marie Bender AAC Clinic	3	3
Lesson VII Applied Eastern Psychology for Children with ADHD Speaker: Ms.Saowalak Langgapin Eastern Psychosocial Treatment Center	2	2
Lesson VIII Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model Speaker: Prof.Dr.Duujian Tsai Pingtung Christian Hospital, Chair Professor Director of the Center for Bioethics and Social Medicine Healthy Asia Co., Ltd. President	5	5

Content	Duration (hour)	
	Medical multidisciplinary team	**Resident**
Module III Field-based Observation **(***elective course***:** ***choose only one from your interests below)***	**30**	**30**
1. Medical Staff Organization, Rajanagarindra Institute of Child Development (RICD)	-	30
2. Observation & field visit 2.1 Medical Staff Organization, RICD (18 hours) 2.2 Field visit (12 hours) 2.2.1 Healing Family Foundation 2.2.2 Kawila Anukul School 2.2.3 Chiang Mai Special Education Center 2.2.4 Heaw Kean Temple 2.2.5 Dulabhathorn Foundation	-	30
3. Multidisciplinary Team, RICD 3.1 Observe and train the language and speech developmental practices for autistic children (6 hours) 3.2 AT/AAC Lab: Tool Development - for individuals wanting 'hands on' time to create materials ex. DIY adaptive switch, communication boards (3 hours) 3.3 Snozelen (3 hours) 3.4 Field visit (12 hours) 3.4.1 Healing Family Foundation 3.4.2 Kawila Anukul School 3.4.3 Chiang Mai Special Education Center 3.4.4 Heaw Kean Temple 3.4.5 Dulabhathorn Foundation 3.5 Elective topics (6 hours)	30	-
4. Observation 4.1 Rajanukul Institute, Bangkok	30	30

Post-training

1. Post-examination training (150 minutes)
2. Presentation (180 minutes)
3. Discussion & feedback (30 minutes)
4. Farewell dinner

Course Content

Module I Surveillance, Screening, Evaluation, Diagnosis, and Early Intervention

Performance Objectives for Module I:

1. Learn Thai developmental system model, risk factors and diagnosis
2. Learn to use the developmental assessments of children to identify children at risk/developmental delay.
3. Learn a process for early intervention and make suitable referrals.

Lesson Content for Module I:

Lesson I Thai Child Developmental System Model (3 hour)
Lesson II Children with Developmental Delay and Neurodevelopmental Disorders (3 hours)
Lesson III Surveillance, Screening, Evaluation, and Early Intervention (24 hours)
1. Developmental Surveillance and Promotion Manual: DSPM (6 hours)
2. Developmental Assessment for Intervention Manual: DAIM (6 hours)
3. Thai Early Developmental Assessment for Intervention: TEDA4I (12 hours)

Module II Treatments (23 hours)

Performance Objectives for Module II:

Gain an understanding of how to give appropriate treatments/intervention for children with developmental delay.

Lesson Content for Module II:

Lesson I Basic Pediatric Physical Therapy in Children with Motor Development Problems (3 hours)
Lesson II Early Stage Development and Postural Support Device Uses (3 hours)
Lesson III Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder (3 hours)
Lesson IV Sensory Integration and Snoezelen (3 hours)
Lesson V Applied Speech Therapy for Children with Autism (1 hours)
Lesson VI Introduction to Augmentative and Alternative Communication, AAC, for Children with Complex Communication Needs (3 hours)
Lesson VII Applied Eastern Psychology for Children with ADHD (2 hours)
Lesson VIII Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model (5 hours)

Module I

Surveillance, Screening, Evaluation, Diagnosis, and Early Intervention

Module I Surveillance, Screening, Evaluation, Diagnosis, and Early Intervention (30 hours)

Performance Objectives for Module I:

1. Learn Thai developmental system model, risk factors and diagnosis
2. Learn to use the developmental assessments of children to identify children at risk/developmental delay.
3. Learn a process for early intervention and make suitable referrals.

Lesson Content for Module I:

Lesson I Thai Child Developmental System Model (3 hour)
Lesson II Children with Developmental Delay and Neurodevelopmental Disorders (3 hours)
Lesson III Surveillance, Screening, Evaluation, and Early Intervention (24 hours)

1. Developmental Surveillance and Promotion Manual: DSPM (6 hours)
2. Developmental Assessment for Intervention Manual: DAIM (6 hours)
3. Thai Early Developmental Assessment for Intervention: TEDA4I (12 hours)

The module includes: A brief overview of Thai Child Developmental System Model, prenatal brain development and risk factors, children with delay development and neurodevelopmental disorders. Information on how to identify children at risk/developmental delay by surveillance, screening, assessment, and how to provide the early intervention.

Lesson I Thai Child Developmental System Model

Learner Objectives

To explain the successful model for Child Developmental System in Thailand.

Lesson content

1. Child First Work Together Project	90 minutes
2. Thai Child Development Program in order to Cerebrate HRH Princess Mahachakra Sirindhorn	90 minutes

Course 1.1: Child First Work Together Project

Learning Objectives: To explain the Child First Work Together Project

Concept

The Child First Work Together Project began by enhancing awareness of health personnel; the personnel who work with children, on how important to screen or assess child development and promote their development properly since early childhood. Children with developmental delay can get most benefit from this project. They can develop at their high potential and not to be the burden of their families. Their parents also be happy and live an easier life because their children can help themselves much more than before. The personnel who work with children have more confidence to screen, assess, and help the children because they were trained on professional skills.

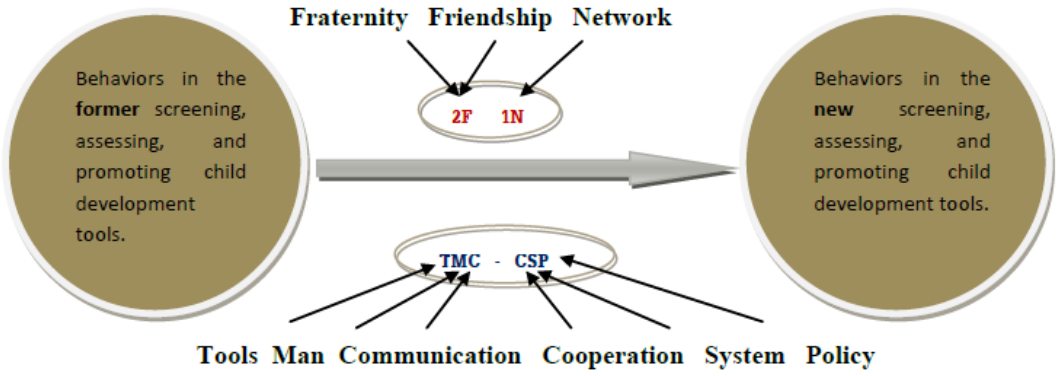
Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
80 minutes	The speaker explains the background, conceptual framework, evolution of development, and benefits.	Power Point
10 minutes	The speaker gives an opportunity for the trainees' inquiry and concludes the main point.	

Handout

Child First – Work Together (CF-WT)
First Place Winner, UN Public Service Award 2013
(Improving the Delivery of Public Services)

The project's name is "Child First – Work together" or CF-WT. It began by enhancing awareness of health personnel; the personnel who work with children, such as, nursery care takers, kindergarten teachers; and parents, on how important to screen or assess child development and promote their development properly since early childhood. Delayed development children can get most benefit from this project. They can develop at their high potential and not to be the burden of their families. Their parents also be happy and live an easier life because their children can help themselves much more than before. The personnel who work with children have more confidence to screen, assess, and help the children because they were trained on professional skills. Then the country will have active human resources to develop the country in the future.
The strategy used in this project is called TMC-CSP together with 2F 1N as driver, motivator, and behavior changer, as illustrated below:



TMC-CSP stands for:
T = Tools that are standard, safe, interesting, up to date, easily to use, and can access by everybody.
M = Man who are empowered on knowledge, attitude, and skills. They are students, general public, personnel who work with children, and experts.
C = Communication through various channels, such as, printed media, radio programs, TV programs, internet, online radio, Face book, web-site, conferences, journals' articles, VDO conferences, VDO presentation, E-book, computer program that can be downloaded to mobile phones and tablets, etc. which are up to date and can access by everybody.
C = Cooperation in every issue, such as, human resources, places, materials, budget, and management, among various group of people, such as, parents, village health volunteers, nursery care takers, kindergarten teachers, personnel from local administrative authorities, health personnel in the hospitals and health care facilities, provincial public health offices, National Health Security Office, foundations, and international organizations.
S = System that are screening and assessment system, early intervention system, referral system, treatment and rehabilitation system, data and information report system that connect among public health services system, other services system, and community to cover all children groups; normal group, risk group, and delayed development group; in every area of the country.
P= Policy that support this project to expand widely by providing manpower, budget, equipments, and technologies. Bottom-up policy can solve the local problems and can sustain the project in the long run.
2F 1 N

F = Fraternity
F = Friendship
N = Network
The RICD works as the coordinator among these groups of people, provides them knowledge, tools, and materials, then support them to work together and help each other solve child development problems.

The main impacts of this project are on children, parents, and our country. Firstly, Thai children were screened and assessed on child development by TDSI since early childhood. When children with delayed development were identified, they were promoted by the health personnel and their parents properly. These children are supported to grow up normally. They can study in school with other normal students and can achieve like others.

After finishing school, they will find a job and can take care of themselves. In the future, this group of children will not be the burden of their family as before. Secondly, parents of delayed development children began to realize that it was their responsibility to observe and screen their own children on child development since early childhood. After being empowered by the training course, they were confidence to promote their children by themselves. Now, they do not totally depend on health personnel, but they can work together to promote their child development. They also felt relieve when their children can help themselves in school and in daily living; and not to be a burden of the family any more. Parents also saved a lot of money and time looking after their children; they had more money and more time to spend with other family's members that help develop better relationship and happiness in the family. Lastly, our country can save a lot of budget on providing treatment and rehabilitation for delayed development children. Before the project started, children with delayed development could not be found easily at early childhood. This group of children became chronic disabilities and needed more budgets for treatment and more time for rehabilitation. However, when the TDSI was developed and many personnel and parents are trained to use it to screen and assess children since early childhood. Children with delayed development were identified earlier. Thus, the cost of treatment and rehabilitation, and the lost of productivity from this group of children are decreased.

For the lessons learned from this project are interpersonal relationship, and parents and community involvement. When the project first started, official contact was made between the RICD and other concerned organizations. It was found that official contact didn't work well, unofficial personal relationship worked better. The good cooperation came from personal contact rather than official one. For parents and community involvement, we found that if we have to do a project like this again, we will invite parents, community leaders, care takers, and kindergarten teachers to involve in our project since early beginning in order to plan, work and evaluate the project with us, because all these people are key success factors of the project. If they feel that they are the owner of the project, they will do their best to make the project achieved. They are in the community, so it is convenience for them to promote child development in the long run. They can do better than us who is a small institute and located far away outside their community.

Course 1.2: Thai Child Development Program in order to Cerebrate HRH Princess Mahachakra Sirindhorn

Learning Objectives: To explain the Thai Child Development Program in order to Cerebrate HRH Princess Mahachakra Sirindhorn

Concept

The Thai Child Development Project (TCDIP) has been generated in order to be used as a communication tool between public health institutions at every level that are involved in the caretaking of children who have suffered from birth asphyxia, children with low birth weight, children who have been delivered naturally; including premature birth, full-term birth, and post-term birth periods, and the children who have been born without abnormalities starting from newborns to the age of 5. The purpose is to encourage surveillance, screening and promotional systems for a single-integrated child development throughout the country.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
80 minutes	The speaker explains the objective, conceptual framework, and results.	Power Point
10 minutes	The speaker gives an opportunity for the trainees' inquiry and concludes the main point.	

Handout

Thai Child Development Project Honoring Her Royal Highness Princess Maha Chakri Sirindhorn, on the Occasion of Her Royal Highness's 5th Birthday Cycle Celebration, April 2, 2015

The Ministry of Public Health, cooperating with associated ministries and departments, has created the Thai Child Development Project Honoring Her Royal Highness Princess Maha Chakri Sirindhorn, on the Occasion of Her Royal Highness's 5th Birthday Cycle Celebration, April 2, 2015. The period of the project operation was from April 1st 2015 to March 31st, 2018. The details are as follow.

1. 2015 Fiscal year
    - 1.1 Established policies and frameworks including cooperation framework for departments in the ministries, resulted in collaboration in related unities and long term management methods.
    - 1.2 Operational methods
        1) Campaigned for screening for child development (42 months old) on July 6- 10, 2015.
        2) Distributed 10,000 sets of child development screening kits, 300,000 books of DSPM and 30,000 books of DAIM.
        3) Created an online program to report screening results obtained from the campaign.
        4) Supervised and followed up the child development screening process and results held in preschools all over the country.
        5) Visited various departments to encourage the team to work hard.
        6) Held academic meetings (to summarize the operation results)
2. 2016 Fiscal Year
    - 2.1 Policy establishment, found 15-20% of children who are at risk of having delayed development, followed up and promote child development at the percentage of 100.
    - 2.2 Operational methods
        1) Published the project's operational guides
        2)Integrated operational planwas usedin associated departments. The plan included 3 topics: (1) Target group and areas, (2) use tools that are standardized (DSPM/DAIM), and (3) integrate reporting system.
        3) Provided manuals and child development promoting tools to newborn child starting from October 1st, 2015 to September 30th, 2017. 800,000 copies of DSPM and 80,000 copies of DIAM were distributed.
        4) Coordinated with the team through the mechanism of the project's board of directors and the commission of project operation.
        5) Developed a reporting system based on the standard of health data center of (HDC).
        6) The continuation of developing DSPM/DAIM to application in which the agreement to use Mobile & Web Application KhunLook was made.
        7) Organized child development screening campaign week for children aged 9, 18, 30 and 42 months old. The campaign was held on July 4-8, 2016 at public health service/ public preschools all over the country.

8) Visited the team in 6 provinces to encourage the team to work hard (April – May 2016).
9) Summarized the project's results of 2016 (Academic meeting)

3. 2017 Fiscal Year

3.1 Established policies using Child development and child development plus: DQ, EQ, EF including factors that affected child's development (Preterm, Birth Defect, iodine and iron). Searched for children who are at risk of Having delayed development as well as followed up and stimulated their development.

3.2 Operational methods

1) Signed the memorandum of cooperation for the integration of pre-school children with 4 ministries (ministry of social development and human security, ministry of public health, ministry of defense and ministry of education) on March 30, 2017
2) Supported the ministry of social development and human security to prepare operational guidelines for pre-school children development promotion.
3) Developed data recording system based on the standard of health data center (HDC).
3.1) Established reporting codes in order to increase the stimulation points for children with delayed development using TEDA4I (7 tools).
3.2) Linked database from Khunlook application via HDC (43 files)
3.3) Added emergency program to search for children who are at risk due to parenting and social influence.
3.4) Provided with guidelines and child development tools.
4) Department of health randomly checked for children's development during March –May 2017. Associated offices worked together in order to organized the screening week aiming to check on children's development aged 9, 18, 30 and 42 months old. The event was held from July 17-21 of 2017.
5) Prepared material for public media, included Father's Footprint Tales, Air War and Small Things that Create Child.
6) Visited the team in 6 provinces to encourage the team to work hard (April – May 2017)
7) Organized academic meeting on the topic of Thailand's fundamental infrastructure, leading Thai children toward security (September 4, 2017)

4. The operation in an overall images **(**April 2015 – September 2017**)**

4.1 Results of pre-school children development screening**.**

1**) 2015** (Only 42 months old children) Target was 59,514 children, completed the screening for 57,889 children (97.27 percent: target was 80 percent), 80.49 percent of children were developed appropriately.
2**)** 2016 (data was as of September 9, 2016) Children at age of 9 18 30 and 42 months old.
2.1) Target was 191,453 children, completed the screening for 166,738 children (87.09 percent)
2.2) 128,091 children were developed appropriately (76.82 percent)

2.3) 37,940 children were at risk of having delayed development (22.75 percent)
2.4) 23,270 children were followed up and supervised as well as promoted for better development for 1 month (61.33 percent)
2.5) 21,934 of children who were at risk have developed and had proper development (94.26 percent)

3**)** 2017 (Data was as of August 31, 2017)
3.1) 172,663 children were targeted and 163,864 of children were successfully screened (94.91 percent)
3.1.1) 129,127 children had normal development (78.80 percent)
3.1.2) 34,737 children were at risk of having delayed development (21.20 percent)
3.1.3) 25,045 children were followed up and supervised as well as promoted for better development (72.10 percent)
3.1.4) 24,367 children who were at risk have developed and had proper development (97.29 percent) and 678 delayed development (2.71 percent)
3.2) Surveyed for children who were at risk during August 11-31, 2017. From 165,142 children, 164,965 children were successfully screened and found out that:
3.2.1 Under the care of parents115,915 (70.26 percent) at risk of delayed development 24,084 (20.78 percent)
3.2.2 Under the care of father 1,611 (0.978 percent) at risk of delayed development 409 (25.39 percent)
3.2.3 Under the care of mother 114,699 (69.53 percent) at risk of delayed development 3,389 (23.06 percent)
3.2.4 Under the care of grandparents 31,239 (18.94 percent)at risk of delayed development 7,213 (23.09 percent)
3.2.5 Under the care of relatives 1,377 (0.83 percent) at risk of delayed development 342 (24.84 percent)
3.2.6 Under the care of other people 124 (0.075 percent) at risk of delayed development 38 (30.65 percent)

4**)** Overall image from October 1, 2016 to August 31, 2017
4.1 Screening target: 1,886,614 children
4.1.1) Successfully screened: 1,414,212 children (74.96 percent)
4.1.2) At risk of having delayed development: 219,254 children (15.50 percent)
4.1.3) Follow up and development stimulation: 164,148 children (72.10 percent)
4.1.4) Children who were at risk have developed and had better and appropriate development: 160,783 children (97.95 percent)
4.1.5) Delayed development: 3,365 children (2.05 percent)
4.2 Budget was from:
- Inspection and Evaluation Bureau
- National Health Security Office
- Department of Academic Affairs

Lesson II Children with Developmental Delay and Neurodevelopmental Disorders

Learner Objectives

To explain children with developmental delay and neurodevelopmental disorders

Lesson content

1. Children with developmental delay 60 minutes
2. Children with Neurodevelopmental Disorders 120 minutes

Course 2.1: Children with Developmental Delay

Learning Objectives

To explain children with developmental delay

Concept

Early childhood is a crucial phase of growth and development because experiences during early childhood can influence outcomes across the entire course of an individual's life. For all children, early childhood provides an important window of opportunity to prepare the foundation for life-long learning and participation, while preventing potential delays in development. Delays in one developmental domain may impair development in another domain. A deficit in one domain may compromise the assessment of skill levels in another domain, even though development in the second domain is normal. Developmental milestones serve as the basis of most standardized assessment and screening tools. It is important to analyze all milestones within the context of the child's history, growth, and physical examination as part of an ongoing surveillance program.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
50 minutes	The speaker explains the Children with Developmental Delay	Power Point
10 minutes	1. The speaker gives an opportunity for the trainees' inquiry. 2. The speaker concludes the main point.	

Course 2.2: Children with Neurodevelopmental Disorders

Learning Objectives

1. To explain children with neurodevelopmental disorders
2. To inform the diagnosis criteria of children with neurodevelopmental disorders

Concept

A child's brain is continual development, growing, at times tremendously, subject to endless modifications and connections due to the continual stimulation provided by the environment in which it develops. It is essential to understand the deficits that can arise from abnormal brain development or be caused by damage at an early age. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition of American Psychiatric Association (2013) notes that neurodevelopmental disorders (NDD) can be classified into intellectual developmental disorder (IDD), communication disabilities, autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), learning disabilities, movement disabilities and other deficiencies.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
110 minutes	The speaker explains about associate between children with developmental delay and children with neurodevelopmental disorders, and diagnosis criteria of children with neurodevelopmental disorders	Power Point
5 minutes	The speaker gives an opportunity for trainees to inquiry. The speaker concludes the main point.	

Lesson III **Surveillance, Screening, Evaluation, and Early Intervention**

4.1 Developmental Surveillance and Promotion Manual: DSPM (6 hours)
4.2 Developmental Assessment For Intervention Manual: DAIM (6 hours)
4.3 Thai Early Developmental Assessment for Intervention: TEDA4I (12 hours)

Lesson 3.1 Developmental Surveillance and Promotion Manual: DSPM

Learner Objectives

In order that the trainees can gain knowledge about the developmental evaluation using the Developmental Surveillance and Promotion Manual (DSPM) and the use of data recording program.

Lesson Content:

1. The principles of the use of the DSPM 30 minutes
2. Methods of the Evaluation and Practices Regarding the DSPM 270 minutes
3. Principles of the early developmental promotion 60 minutes

Course 3.1.1: The Principles of the Use of Developmental Surveillance and Promotion Manual (DSPM)

Learning Objectives

1. To identify the principles of the use of Developmental Surveillance and Promotion Manual with suggestions the instruments
2. To identify the purposes of using each type of tools

Concept

In order to evaluate the children development with accuracy, reliability and standardization, each assessor needs to have knowledge and understanding of the correct principles, and chooses to use the suitable tools according to the purposes of the behavior development in each item.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
10 minutes	1. The speaker lectures on the principles of development screening. 2. The speaker asking the trainees for trying out to import data in the evaluation form and ask "For 27 month children, how old are they evaluated?" "If the development evaluation result is "fail," how can the children do next?"	1. Power Point 2. Developmental Surveillance and Promotion Manual (DSPM)
15 minutes	1. The speaker distributes a set of materials for the trainees and randomly asks 2-3 trainees 1.1 What aspect of development can you use this material? 1.2 How many aspects can we do? 1.3 The speaker concludes the materials used in the child development screening. 1.4 Describe the use of materials according to sets of materials, assistants, and demonstrate the use of each material. 1.5 Demonstrate how to use it, and randomly choose the trainees to play a role of assessor and the development assessor	1. Materials in the child development assessment 2. Developmental Surveillance and Promotion Manual (DSPM) 3. VCD
5 minutes	1. The speaker conclude the principles of development screening/materials 2. The speaker give the opportunity for inquiry.	

Course 3.1.2: Methods of the Evaluation and Practices Regarding the Developmental Surveillance and Promotion Manual

Learning Objectives

1. To be able to identify the methods of development evaluations by using developmental Surveillance and Promotion Manual (DSPM)
2. To be able to choose the materials and follow the process of evaluation and the criteria correctly

Concept

A child development assessment in each age level is a surveillance of child development, and it makes the issue or the trend of a child development shown. If a problem is found, hurriedly help or stimulate the development in order to develop the children properly or accordant with the criteria. By the way, the acquisition of information is from doing the test, observing or doing the parent survey. The doer has to use the methods appropriately and have the knowledge, understanding and skills in evaluation as well as in the correct criteria so that the information will be accurate.

Learning activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
120 minutes	1. The speaker gives the lecture on the methods of development evaluation, demonstrates and plays VCD of the development evaluation which can be divided into 5 periods of time: 1.1 Infant to 1 month, 1 - 2 months, 3 - 4 months, 5 - 6 months, 7 - 8 months, 9 months 1.2 At the age of 12 - 10months, 15 - 13 months, 16-17 month , 18month 1.3 At the age of 19 - 24 months, 25 - 29 months, 30 months 1.4 At the age of 36 - 31months, 42months, 42months 1.5 At the age of 37 - 48 months, 49 - 54 months, 55 60 months	1. Power Point 2. Developmental Surveillance and Promotion Manual (DSPM) 3. Materials of development evaluation 4. VCD
140	2. Practice evaluating the development by practicing the material selection, the process of assessment, and considering criteria. In these practices, the trainees will be an evaluator, and the speaker each group will be a learner who is evaluated and evaluate as well. Also, the other trainees will be the observers who record the results of practice as pass or fail. Moreover, the survey consists of selecting the materials, the process of assessment and criteria. The speaker each group summarizes the answers and gives more advices about each skill in case of the finding of the mismatching evaluation. This can be divided into 6 stations as follows.	

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
	Station 1: Practice to calculate the span of age **Station 2:** infant - 1 month, 1 - 2 months, 3 - 4 months, 5 - 6 months,7 - 8 months, 9 months **Station 3:** 10 - 12 months, 13 - 15 months, 16-17months, 18 months **Station 4:** 19 - 24 months, 25 - 29 months, 30 months **Station 5:** 31 - 36 months, 37 - 42 months, 42 months **Station 6:** 37 - 48 months, 49 - 54 months, 55 - 60 months	
10 minutes	1. The speaker concludes the methods of development evaluation for children 2. The speaker gives the trainee the opportunity for inquiry.	

Course 3.1.3: Principles of the Early Developmental Promotion

Learning Objectives

To identify the principles of the early developmental promotion

Concept

The development evaluation is the beginning of the children help. When the result of the development evaluation was a child did not meet the development at his age, the development promotion and provision of parents about a child care is important. Or even the development evaluation was progressive at his age, the advice for parents to continuously promote the development higher. For public health personnel, they should have the knowledge of development promotion in order to help a child and can be as a consultant to the parents.

Learning activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
50 minutes	The speaker lectures the principle to promote early child development.	1. Power Point 2. Developmental Surveillance and Promotion Manual (DSPM)
10 minutes	The speaker concludes the principles of the early developmental promotion and gives the trainee the opportunity for inquiry.	

Handout

Materials of Development Evaluation

The 1st set: a red cloth ball Age level: 1-2 months FM skill: gaze until the half part of body Age level: 3-4 months FM skill: look through the half part of the body Age level: 3-4 months FM skill: see things moving around at a 180-degree angle
The 2nd set: a shaker toy Age level: Newborn - month GM skill: lie down with a prone position and raise the head turning to one side Age level: 3-4 months GM skill: lie down with prone position to raise the head and the chest far from the floor GM skill: face to the sound Age level: 5-6 months GM skill: press himself up from the prone position by stretching both arm FM skill: reach and hold things while in the supine position Age level: 7-9 months GM skill: sit still, bend the body and use hand freely when playing GM skill: stand and hold the furniture tight at a high level of his chest Age level: 9 months GM skill: sit up from lying on back GM skill: hold and walk beside for 4-5 steps
The 3th set: a cloth doll Age level: 5-6 months PS : listen to people and look at the toy which the testers is playing with children for 1 minute long Age level: 30 months EL : speak 2 words with 4 meaningful 4 verbs Age level: 43-48 months PS : put on 3 big buttons (at least 2 cm) by himself
The 4th set: a picture book Age level: 7-9 months FM skill: stare at the book with adults for 2-3 seconds Age level: 18 months FM skill: open the pages of book made of cardboard one by one by himself
The 5th set: a cloth with 30 × 30 cm size and a hole in the middle Age level: 7-9 months PS skill: Peekaboo
The 6th set: a rubber ball for squeezing Age level: 9 months GM skill: sit up from lying GM skill: hold and walk beside for 4-5 steps Age level: 30 months GM skill: throw the small ball by putting the hands above the head.

The 7th set: 8 wooden cubes

Age level: 9 months
FM skill: hold 2 wooden cubes and know them
Age level: 18 months
FM skill: Build 2 layers of the wooden cubes
Age level: 124-9 months
FM skill: Build 4 layers of the wooden cubes
Age level: 30 months
FM skill: build the cube wood 8 layer
RL skill: place the objects "above" and "below" according to the instruction
PS skill: wait until his turn with no adult's instruction
Age level: 55-60 months
RL skill: select 8 colors according to the instruction

The 8th set: a small pieces of objects with a 2- cm length

Age level: 9 months
FM skill: use the thumb and other fingers to pick up things from the floor
Age level: 10-12 months
FM skill: use the forefinger and a thumb to pick up small things

The 9th set: toys with their purposes (cup, spoon, comb, toothbrush, car, cup)

Age level: 10-12 months
PS skill: play things according to the benefits of that thing
Age level: 13-18 months
RL skill: follow the simple instructions without actions
EL skill: name the objects correctly
Age level: 18 months
RL skill: follow the instruction by selecting 3 types of objects
Age level: 19-24 months
RL skill: follow the instruction by selecting 4 types of objects
Age level: 31-36 months
RL skill: follow with the instruction by bringing 2 types of objects
Age level: 37-42 months
RL skill: follow the instruction continuously with 2 verbs and 2 objects

The 10th set: a toy car with wheels and a rope for towing

Age level: 13-18 months
GM skill: walk and tow a toy or an object

The 11th set: pencil notebook

Age level: 13-18 months
FM skill: draw (a line) on paper
Age level: 31-36 months
FM skill: copy the line to make a circle
Age level: 42-37 months
FM skill: copy drawing a circle
Age level: 43-48 months
FM skill: copy drawing + (cross)
Age level: 55-60 months
FM skill: hold the pencil correctly

The 12th set: the ball with a 20- cm diameter Age level: 18 months GM skill: run well without falling, and not walk fast GM skill: hold the ball and walk 3 meters long without falling, and losing the balance Age level: 19-24 months GM skill: swing the leg to kick the ball Age level: 42 months GM skill: use the arm to get the ball
The 13th set: the geometric forms Age level: 30 months FM skill: follow the instruction by handing one object to the tester Age level: 42 months FM skill: separate 3 geometric forms Age level: 48-43 months RL skill: choose the objects with a larger and a smaller size
The 14th set: a 3 -piece jigsaw puzzle Age level: 42 months FM skill: assemble a 3 -piece jigsaw puzzle
The 15th set: pictures of male – female Age level: 42 months RL skill: select the picture men and women
The 16th set: categorizing things (Picture cards of food, clothing, animals) Age level: 42 months RL skill: categorize the objects by a type of clothes
The 17th set: scissors, paper with a 10 cm size Age level: 43-48 months FM skill: cut 2 pieces paper with a 10 cm size into a shape of square
The 18th set: a 8 -piece jigsaw puzzle Age level: 49-54 months FM skill: assemble a 8 -piece jigsaw puzzle
The 19th set: pictures of day – night Age level: 49-54 months RL skill: select pictures showing the daytime and night
The 20th set: tale books Age level: 30 months PS skill: listen to the story for 5 minutes long

The calculation of child age

Read and answer all the questions below.

A Thai girl who was born on April 10th, 2010 was taken to a clinic for a development assessment on January 28th, 2013 by her mother.

1. How many months is her actual age?
2. What age levels should you start doing the developmental assessment
3. In case that the result of the development assessment was negative (-) for no.1, what should you do next?
4. .In case that the result of the development assessment was positive (+) for no.1, what should you do next?

Answers

The calculation of child age

Read and answer all the questions below.

A Thai girl who was born on April 10th, 2010 was taken to a clinic for development assessment on January 28th, 2013 by her mother.

1. How many months is her actual age?
   At the age level of 2:9 years (33 months)
2. What age levels should you start doing the developmental assessment?
   At the age level of 24-29 months
3. In case that the result of the development assessment was negative (-) for no.1, what should you do next?
   At the age level of 24-29 months, in case that the result is positive (+) , the assessment should be stopped and evaluated at the age level of 24-29 months. However, if the result is negative (-), the assessment should be evaluated at the lowest of age until getting a positive result(+) .
4. In case that the result of the development assessment was positive (+) for no.1, what should you do next?
   At the age level of 30-35 months, and the result is negative(+) , the assessment should be stopped and it can be concluded that the development was at the age of the last positive value appeared.

Lesson 3.2 Developmental Assessment for Intervention Manual: DAIM

Learner Objectives

In order that the trainees gain knowledge about the developmental assessment using Developmental Assessment for Intervention Manual (DAIM) and the Neurodevelopment evaluation.

Lesson Content

1. Principles of the Use of DAIM	30 minutes
2. Methods of the Evaluation and Practices Regarding the DAIM	270 minutes
3. Methods of the Evaluation of Neurodevelopment	60 minutes

Course 3.2.1: Principles of the Use of the Developmental Assessment for Intervention Manual

Learning Objectives

Indicate the principles of the developmental evaluation by using DAIM to specify the objectives of the use of each instrument.

Concept

A child developmental evaluation need to be correct, reliable, standardized as the evaluator needs to understand and realize what the correct principle is including how to apply the instrument to the objectives of developmental behaviors in each item.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
10 minutes	The speaker gives a lecture on the principle of developmental screening. After the lecture, 1. Pose the questions for the trainee to try to record the data into the evaluation form. The questions are "If the child is at the age of 27 months, at what level of age can you evaluate them in each aspect? and "How can you do in case that the children cannot pass the developmental evaluation?. 2. Pose the question for the trainee to try to record the data into the evaluation form. "How can you do in case that the children cannot pass the developmental evaluation?.	1. Power Point 2. Developmental Assessment for Intervention Manual (DAIM)
15 minutes 5 minutes	1. The speaker gives each the trainees a set of materials and randomly ask a few trainees questions. 1.1 What aspect can you use that kind of material in evaluation? 1.2 How many aspects is it used? The speaker summarizes the uses of materials in a child developmental screening 1.3 Give the lectures on the use of materials ordered in the set of materials, and the assistant and the speaker demonstrate how to use each material 2. The speaker demonstrate the method to use the materials, randomly choose the trainee to be as a child who is evaluated or developmental evaluator 3. The speaker conclude the principle of the developmental screening/ materials 4. The speaker give the trainees time for more Inquiries	1. Materials used in a developmental evaluation 2. Power Point

Course 3.2.2: Methods of the Evaluation and Practices Regarding the Developmental Assessment for Intervention Manual

Learning Objectives

1. To identify the methods of the developmental evaluation by using the Developmental Assessment for Intervention Manual
2. To select the use of materials and process of evaluation with criteria correctly

Concept

The developmental evaluation of a child in each age level is the way to monitor a child development in order to see the problem or the tendency of a child development. In case of having a problem, the help or the stimulation of development of each age is needed and met the criteria. For data collection, the test, the observation or a parents' enquiry are employed. The person has to take charge of selecting an appropriate materials, having knowledge and skills of evaluation and criteria so as to get the accurate data.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
120 minutes	The speaker gives a lecture on the methods of a developmental evaluation and make a demonstration. While playing the VCD of the age level of the developmental evaluation, the speaker gives a lecture, demonstrates and plays the VCD which is comprised of the following three periods of time: 1. infant, 1 month, 2 months, 3 – 4 months 2. 5 –6 months, 7 – 9 months, 10 - 12 months 3. 13 – 15 months, 16-18 months, 19 – 24 Months	1. Power Point 2. Developmental Assessment for Intervention Manual (DAIM) 3. Materials for developmental evaluation 4. VCD
140 minutes	Practice the development evaluation by choosing the materials, the steps of evaluation and the consideration of criteria and judgment. In this step, the trainee is an evaluator and the speaker of each group plays a role of a child who is evaluated and also evaluates this practice step. Other trainees can be as observers and take notes of the practices as pass or fail in an evaluation form which contains selecting the material, the steps of evaluation practice, the judgment of the "pass' benchmark. The speaker in each group will conclude the answer and give additional suggestion in each skill in case of having a disagreement. In this step, there are 6 stations as follows:	

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
	Station 1: calculate the span of age **Station 2:** infant, 1 month, 2 months, 3 – 4 months **Station 3:** 5 –6 months, 7 – 9 months, 10 - 12 Months **Station 4**: 13 – 15 months, 16-18 months, 19 – 24 months **Station 5**: 31 - 36 months, 37 - 42 months, 42 months **Station 6**: 37 - 48 months, 49 - 54 months, 55 - 60 months	
10 minutes	1. The speaker concludes the evaluation methods for children 2. The speaker give the trainees time for more Inquiries	

Course 3.2.3: Method of Child Neurodevelopment Evaluation

Learning Objectives

To be able to explain the method of Child Neurodevelopment Evaluation at each age

Concept

The evaluation of Neurodevelopment is as an evaluation of the nervous system. When the evaluation result finds out that there is an abnormality, it indicates that the baby's brain can be harmful, lack of oxygen, and the abnormality can impact on the nervous system, the muscular system. Besides, a child can have a developmental difficulty. Thus, the risk group of children needs to be checked the Neurodevelopment in order to be taken care of, supported in case of having an abnormality. The method of checking uses the test of the child and observes their responses and an evaluator needs to have knowledge and skills in this checking stage for the accurate result.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
60 minutes	The speaker explains the method of child Neurodevelopment evaluation each item together with playing the VCD relating to the method of child Neurodevelopment evaluation.	1. Power Point 2. Developmental Assessment for Intervention Manual (DAIM) 3. VCD

Lesson 3.3 Thai Early Developmental Assessment for Intervention: TEDA4I

Learner Objectives

In order for the trainees to understand the importance of the early developmental support for intervention and the methods of Thai Early Developmental Assessment for Intervention correctly. Also, to have knowledge and skills in the Thai early developmental support for intervention and to refer the case to the department and the organization involved.

Lesson Content

1. Thai Early Developmental Assessment for Intervention	30 minutes
2. Methods of the Thai Early Developmental Assessment for Intervention and Practices	570 minutes
3. Principles of the Early Developmental Support for Intervention	120 minutes

Course 3.3.1: Thai Early Developmental Assessment for Intervention

Concept

Thai Early Developmental Assessment for Intervention is an instrument with deep details in the methods of intervention support and is easily practicable and convenient for the officers. In this course, the understanding about the framework and the methods of the manual uses is needed in order to get the results of the assessment and intervention support correctly and appropriately.

Learning Objectives

1. To understand the framework of Thai Early Developmental Assessment for Intervention
2. To understand the principles and to use the materials for Thai Early Developmental Assessment for Intervention correctly.
3. To identify the media and materials used for Thai Early Developmental Assessment for Intervention.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
20 minutes	1. The speaker introduces the lesson by randomly ask 1- 2 trainees “What evaluation forms have you ever used for a child developmental assessment?” 2. The speaker gives a lecture on “The Principle of Thai Early Developmental Assessment for Intervention” 3. The speaker give the trainee for calculate of kids’ age and has the trainee write down the answer on the handout. 4. The speaker concludes the concept of “The Principle of Thai Early Developmental Assessment for Intervention.”	Power Point
10 minutes	1. Showing a few pieces of materials, the speaker asks “what aspect is each material used for developmental assessment? For what age level? 2. The speaker sums up the materials used for the child developmental assessment.	1. Materials for developmental assessment 2. Power Point

Course 3.3.2 Principles of Thai Early Developmental Assessment for Intervention

Concept

The Thai Early Developmental Assessment for Intervention is a child support for improving a self-potentiality considerably and appropriately with the child's difficulties in order to promote child's development at each age level. The Officers need to understand the correct principles of a child developmental support including an appropriate method of child intervention.

Learning Objectives

1. To comprehend the principles of a child developmental support
2. To be able to obtain the Thai Early Developmental Assessment for Intervention correctly and appropriately.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
120 minutes	1. The speaker gives a lecture on "Methods of Development Assessment and the "pass" of the benchmark of Gross Motor Development" and demonstrates. 2. The speaker asks trainees to work in pairs: the first person plays a role as an evaluator and the other as a child. They practice evaluating a child development and consider the benchmark. During the role play, they take turn playing a role for each item and the other students of that group discuss whether the assessment method and the "pass" benchmark used are right. 3. The speaker replaces the next pair of students and continue doing a role play until completing 25 items. 4. The speaker concludes the methods of the assessment and the "pass" benchmark.	1. Power Point 2. Thai Early Developmental Assessment for Intervention (TEDA4I) 3. Materials for Gross Motor Development Assessment 4. VCD
120 minutes	1. The speaker introduces the lesson by randomly asking 1- 2 trainees to select the materials for Fine Motor Development and Intelligence. 2. While giving a lecture on "Methods of Development Assessment and pass the benchmark of Fine Motor Development and Intelligence," the speaker gives a demonstration. 3. The speaker asks students work in pairs: the first person plays a role as an evaluator and the other as a child for evaluating a child development and considering the benchmark. To start with no.1, the children take turn playing a role for each item and the other students of that group share ideas of whether the assessment method and the "pass" benchmark used are right.	1. Power Point 2. Thai Early Developmental Assessment for Intervention (TEDA4I) 3. Materials for Fine Motor Development and Intelligence 4. VCD

Allotted Time	**Teaching/Learning Strategies/ Procedures:**	**Resources/Materials**
	4. The speaker takes turn to the next pair and continue doing a role play until completing 29 items. 5. The speaker concludes the methods of the assessment and the "pass" benchmark.	
120 minutes	1. The speaker introduces the lesson by randomly ask 1- 2 trainees to select the materials for Receptive Language Development. 2. The speaker gives a lecture on "Methods of Development Assessment and pass the benchmark of Receptive Language Development, with demonstration. 3. The speaker asks students work in pairs: the first person plays a role as an evaluator and the other as a child for evaluating a child development and considering the benchmark. To start with no.1, the children take turn playing a role for each item and the other students of that group share ideas of whether the assessment method and the "pass" benchmark used are right. 4. Take turn to the next pair and continue doing a role play until completing 29 items. 5. The speaker concludes the methods of the assessment and the "pass" benchmark.	1. Power Point 2. Thai Early Developmental Assessment for Intervention (TEDA4I) 3. Materials for a developmental assessment regarding a receptive language development 4. VCD
120 minutes	1. The speaker introduces the lesson by randomly asking 1- 2 trainees to select the materials for Receptive Language Development 2. The speaker gives a lecture on "Methods of Development Assessment and the "pass" of the benchmark of Receptive Language Development and gives demonstration. 3. The speaker asks trainees work in pairs: the first person plays a role as an evaluator and the other as a child for evaluating a child development and considering the benchmark. To start with no.1, the children take turn playing a role for each item and the other trainees of that group share ideas of whether the assessment method and the "pass" of the benchmark used are right. 4. Take turn to the next pair and continue doing a role play until completing 31 items. 5. The speaker concludes the methods of the assessment and the "pass" benchmark.	1. Power Point 2. Thai Early Developmental Assessment for Intervention 3. Materials for a child developmental assessment regarding a Receptive Language Development 4. VCD

Allotted Time	**Teaching/Learning Strategies/ Procedures:**	**Resources/Materials**
120 minutes	1. The speaker introduces the lesson by randomly asking 1- 2 trainees to select the materials for Receptive Language Development 2. The speaker gives a lecture on “Methods of Development Assessment and pass the benchmark of Personal and Social Development” with demonstration. 3. The speaker asks trainees work in pairs: the first person plays a role as an evaluator and the other as a child for evaluating a child development and considering the benchmark. To start with no.1, the children take turn playing a role for each item and the other trainees of that group share ideas of whether the assessment method and the “pass” of the benchmark used are right. 4. Take turn to the next pair until completing 31 items. 5. The speaker concludes the methods of the assessment and the “pass” benchmark.	1. Power Point 2. Thai Early Developmental Assessment for Intervention 3. Materials for Personal and Social Development 4. VCD

Course 3.3.3: Methods of the Thai Early Developmental Assessment for Intervention and Practices

Concept

The Thai Early Developmental Assessment for Intervention contains the standardized process which is necessary for studying and having skills in order to be assured that the Thai Early Developmental Assessment for Intervention can be held to the same standard.

Learning Objectives

1. To be cultivated and to understand the process of the developmental assessment.
2. To be able to evaluate the Thai Early Developmental Assessment for Intervention correctly.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
30 minutes	1. The speaker introduces the lesson and randomly asks 1- 2 trainees "How can you support a child development? 2. The speaker gives a lecture on "The Principle of a Thai Early Developmental Assessment for Intervention."	1. Power Point 2. Thai Early Developmental Assessment for Intervention
60 minutes	1. The speaker ask the question, "In case that a case study of a child development does not accordant with the age level, in what way can you help the children? 2. The speaker asks the trainees to demonstrate the way to assist the case study. 3. The speaker concludes the way to support the early intervention.	1. Power Point 2. Thai Early Developmental Assessment for Intervention

Handout

The methods of Thai Early Developmental Assessment for Intervention

A case study: A Thai boy who was born on May 18th, 2013 was in a process of development assessment on January 29th, 2016. The findings were:

1. Gross Motor Development (GM) is at the age level of 4 – 5 months
2. Fine Motor Development and Intelligence (FM) is at the age level of 4 – 5 months
3. Receptive Language Development (RL) is at the age level of 4 – 5 months
4. Expressive Language Development (EL) is at the age level of 6 – 7 months
5. Personal and Social Development (PS) is at the age level of 6 - 7 months

Activities

1. In this case, how old is he (his actual age)?
2. In what area is this case needed to be taken care? What skills? How can we support this case? Demonstrate the method to support this case for each skill.

Answers for the Handout 1

The methods of Thai Early Developmental Assessment for Intervention

1. In this case, his actual age is 8 months 11days
2. This case is needed to be taken care of
   - 2.1 Gross Motor Development (GM) the skills to turn over and turn face up
   - 2.2 Fine Motor Development and Intelligence (FM) the skill to grab something with one hand and reverse to the other hand
   - 2.3 Receptive Language Development (RL) the skill to look at someone talking and something presented for five seconds
   - 2.4 Expressive Language Development (EL) the skill to pronounce one syllable word without the meaning (pronounce the vowel sound with a consonant one, 4 sounds at least)
   - 2.5 Personal and Social Development (PS) the skill to play peekaboo

The methods of Thai early Developmental Assessment for Intervention

A case study: A Thai boy who was born on June 22th, 2012 was in a process of development assessment on January 29th, 2016. The findings were:

1. Gross Motor Development (GM) is at the age level of 36 - 41 months
2. Fine Motor Development and Intelligence (FM) is at the age level of 36 - 41 months
3. Receptive Language Development (RL) is at the age level of 30 – 35 months
4. Expressive Language Development (EL) is at the age level of 36 - 41 months
5. Personal and Social Development (PS) is at the age level of 30 – 35 months

Activities

1. In this case, how old is he (his actual age)?
2. In what area is this case needed to be taken care? What skills? How can we support this case? Demonstrate the method to support this case for each skill.

Answers

The methods of Thai early developmental supports for intervention

1. In this case, his actual age is 43 months) 3 years 7 months 7 days (
2. This case is needed to be taken care of
   - 2.1 Gross Motor Development (GM): the skills to run around the barrier, run forward with hanging on the tiptoe together with hands' sway
   - 2.2 Fine Motor Development and Intelligence (FM): the skills to copy the picture of circle as the sample alternate with the hands' sway
   - 2.3 Receptive Language Development (RL): the skills to choose the material both a big and a small size and follow the instruction of bringing both out of the room
   - 2.4 Expressive Language Development (EL): the skills to answer the questions about the benefit of the use of something, and pose and answer four kinds of questions: "who," "what," "where," and "why"
   - 2.5 Personal and Social Development (PS): the skills to follow the rules of the team by taking turn to play, waiting for his/her turns and brush his/her teeth after the parents' guidance

Module II
Treatments

Module II Treatments (27 hours)

Performance Objectives for Module II:

Gain an understanding of how to give appropriate intervention for children with developmental delay and neurodevelopmental disorders.

Lesson Content for Module II:

Lesson I	Basic Pediatric Physical Therapy in Children with Motor Development Problems
Lesson II	Early Stage Development and Postural Support Device Uses
Lesson III	Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder
Lesson IV	Sensory Integration and Snoezelen
Lesson V	Basic Speech therapy for children with autism
Lesson VI	Introduction to Augmentative and Alternative Communication, AAC, for children with Complex Communication Needs
Lesson VII	Applied Eastern Psychology for Children with ADHD
Lesson VIII	Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model

The module includes: A brief overview of concepts and principles of intervention for children with developmental delay, children with neurodevelopmental disorders. Information on how to approach the children (observation, and practicum).

Lesson I: Basic Pediatric Physical Therapy in Children with Motor Development Problems

Department: Physical Therapy

Learner Objectives

Participants will be able to

1. Explain children with motor development problems
2. Assess basic physical therapy regarding motor development problems
3. Manage basic physical therapy regarding motor development problems

Lesson Content

1. Children with Motor Development Problems	45 minutes
2. Conceptual Frameworks	45 minutes
3. Assess Basic Physical Therapy Regarding Motor Development Problems	45 minutes
4. Manage Basic Physical Therapy Regarding Motor Development Problems	45 minutes

Course 1.1: Children with Motor Development Problems

Concept

Motor development is the development of movement. Gross motor skills that are large movements of the body including sitting, walking, running and climbing stairs. Movement can be seen and felt and a delay in motor development is usually the first sign of a real problem because it is noticed far sooner than a problem with seeing, hearing or communication. Pediatric physiotherapy specializes in childhood motor development. It aims to ensure that children seamlessly acquire motor skills (rolling, crawling, walking, running, jumping, etc.) without compensations, delays, or asymmetries.

Learning Objectives

To understand the definitions, signs and symptoms, classification, causes, and existing problems (major and associated problems) in children with motor development problems

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
5 minutes	The speaker introduces the lesson by randomly ask 1- 2 trainees and reflection	
30 minutes	The speaker gives a lecture on “children with motor development problems”	Powerpoint, VDO
10 minutes	1. Problem based learning group work 2. The speaker concludes the concept	Case study

Course 1.2: Conceptual Frameworks

Concept

The International Classification of Functioning, Disability and Health (ICF) is a classification of health and health-related domains. As the functioning and disability of an individual occurs in a context, ICF also includes a list of environmental factors. ICF is the WHO framework for measuring health and disability at both individual and population levels.

Learning Objectives

To understand the conceptual frameworks on International Classification of Functioning, Disability and Health, and holistic views of children's well beings based on International Classification of Functioning, Disability and Health

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
5 minutes	The speaker introduces the lesson by randomly ask 1- 2 trainees and Experience exchange	VDO
30 minutes	Group work on analytical case study ICF frameworks The speaker gives a lecture on "International Classification of Functioning, disability and health, and holistic views of children's well beings based on International Classification of Functioning, Disability and Health"	ICF template
10 minutes	1. Trainees' presentation and discussion 2. The speaker concludes the concept	

Course 1.3: Assess Basic Physical Therapy Regarding Motor Development Problems

Concept

Children with motor problems are often referred for evaluation of these problems to physical therapist. Measures that therapists use to assess seriously disabled children are often inappropriate for these children. The Basic Gross Motor Assessment is useful tool for evaluating motor problems in children and identifying those children who require further treatment.

Learning Objectives

To understand and us the conceptual frameworks on International Classification of Functioning, Disability and Health, and holistic views of children's well beings based on International Classification of Functioning, Disability and Health

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
30 minutes	The speaker gives a lecture on "Basic screening in motor development milestone" 1. Essential information (History of pregnancy and labor, medical conditions, etc.) 2. General appearance 3. General performance (vision, hearing, communication, etc.) 4. Basic assessment 4.1 Typical and atypical motor developments 4.2 Muscle tone assessment 4.3 Muscle length and range of motion assessment 4.4 Body asymmetry assessment 4.5 Related reflexes assessment 4.6 Activities of daily living assessment 4.7 Care in a child's activity of daily living by caregiver 4.7.1 Self-care in activity of daily living 4.7.2 24-hour child care 4.8 Prioritize essential problems	Powerpoint
15 minutes	Speaker demonstrates	Case study

Course 1.4: Manage Basic Physical Therapy Regarding Motor Development Problems

Concept

If the child having motor developmental delay, physical therapist will problem-solve with family's routines and environment to find ways to enhance and build your child's motor developmental skills. In addition to evaluating the child and the environment in which the child moves, the physical therapist may guide the child's movements or provide cues to help the child learn a new way to move.

Learning Objectives

To understand and can manage basic intervention for helping children with motor development problems

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
30 minutes	The speaker gives a lecture on "Manage basic physical therapy regarding motor development problems" 1. Child and parents approach and communication 2. Handling and carrying 3. Passive movement, positioning, play, muscle tone adjustment (passive movement, positioning, play) 4. Passive movement, positioning, equipment, muscle length and ranges of motion treatment (passive movement, positioning, equipment) 5. Motor developmental stimulation including reflexes management 6. Physical therapy management in body asymmetry (deformities such as hip dislocation, scoliosis, etc.)	Powerpoint
15 minutes	Speaker demonstrates	Case study

Lesson II: Early Stage Development and Postural Support Device Uses (3 hours)
Department: RICD Wheelchair Project
Learner Objectives

Trainees will be able to

1. Identify the importance of using proper postural support devices.
2. Identify specific devices for different scenarios.
3. Tell the major differences between improperly and properly used equipment

Lesson Content

1.	Postural Support Devices and Their Importance in Early Intervention	60 minutes
2.	Implementing Devices and Adapting Them Appropriately	60 minutes
3.	Overlap of Postural Support Devices and Other Therapies	60 minutes

Course2.1: Postural Support Devices and Their Importance in Early Intervention

Concept

Early intervention has long been established as one of the most effective methods for mitigating the negative symptoms people affected by disability face. We will look at how proper postural support given at a young age also has long-term positive effects for people with disabilities.

Learning Objectives

We will look at the development of young children's muscular-skeletal system and how to ensure that children are given the best chance at maintaining or achieving independence later in life. We will also review the different ways proper postural support links to other areas of life (emotional well-being, social interaction, digestive health, respiratory development, etc) and their development.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
10 minutes	Introduction/Overview	PowerPoint
15 minutes	Disability Simulation and Reflection	Activity Materials
15 minutes	Early Development Stages :We will discuss the early stages of development and the milestones typically and a-typically children can expect to achieve. This will be re-examined from the perspective of the devices these children use. The use of devices for encouraging development is not relegated to children affected by disability. We will cover the results of both properly and improperly implemented postural support.	PowerPoint
10 minutes	Identifying Important Aspects of Each Stage and the Difficulties Children Face :We will have hands-on experience on functioning with simulated disabilities. A task will be given to a group of participants who have a "disability" and another who do not. We will observe the challenges the group with disability face and talk about what it would be like to function day to day with this disability.	Worksheet
10 minutes	Conclusion	
5 minutes	Extra Time Available if Another Section Goes Too Long	

1 POSTURAL SUPPORT & EARLY INTERVENTION

INSTRUCTIONS: (1) Divide into groups, (2) Choose a developmental level, (3) Complete the chart, and (4) Share with other groups.

Developmental level/ Diagnosis	Primary Issue	Secondary Issues
(example: 3-6 month old with right-sided paralysis) →	(Paralysis makes it difficult for child to move symmetrically: crawling) →	• Muscles & ligaments develop on right side only • Cervical lordosis is underdeveloped • Head control movement is impaired • May lead to development of scoliosis •
Newborn with congenital scoliosis (abnormal lateral curvature of the spine) →	→	• • • • •
3-6 month old with hypotonia →	→	• • • • •
6-12 month old with spastic cerebral palsy →	→	• • • • •
12 month old with hydrocephalus →	→	• • • • •

NOTES:

Course 2.2: Implementing Postural Devices and Adapting Them Appropriately

Concept

This section will cover the different devices that are available and how they can be used to help children mitigate the difficulties that their disabilities bring. We will examine specific use-cases and how to implement them appropriately.

Learning Objectives

Participants will gain an appreciation for the usefulness of these devices as well as understand the importance of adapting them correctly to the patient's condition.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
5 minutes	Introduction/Overview	PowerPoint
10 minutes	Postural Devices and Their Purposes :This will cover a variety of devices (wheelchairs, standers, corner chairs, PT equipment, etc.) and the demographics they are designed for. We will experience different types of devices and how they affect a person different ways.	PowerPoint
15 minutes	Activity Using Devices :Participants will try a variety of different postural devices (cushions, chairs, etc.) and describe the sensation they had as they used it. They will discuss specific devices that would apply to the disabilities described in the previous section	Activity Materials/Worksheet
10 minutes	Group Discussion on Experience	
10 minutes	Adapting Devices Correctly	PowerPoint/Activity Materials
5 minutes	Conclusion	
5 minutes	Extra Time Available if Another Section Goes Too Long	

2 ADAPTING POSTURAL DEVICES

INSTRUCTIONS: (1) Divide into groups, (2) Groups will rotate to a new station every 4 ½ - 5 minutes, (3) Each group member should try out each postural device, and (4) Complete the chart.

Standing Frame?	**Cushions**
● How do you feel? ● Where is your attention directed? ● What is your range of motion?	● How do you feel? Comfort level: ● How does your posture differ with each type?
Head & lateral supports	**Lap belt & Butterfly Harness**
● How do you feel? ● Where is your attention directed? ● Describe your posture and alignment of your hips and spine: ● What is your range of motion?	● How do you feel? ● Where is your attention directed? ● Describe your posture and alignment of your hips and spine: ● What is your range of motion?

Course 2.3: Overlap of Postural Support Devices and Other Therapies

Concept

These devices are designed to enhance other areas of a person's life. We will explore how these devices compliment the different therapies that are used to help promote a child's development.

Learning Objectives

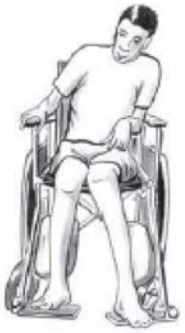
Participants will identify tools that will be useful in their areas of service that will enhance their effectiveness when engaging with their patients.

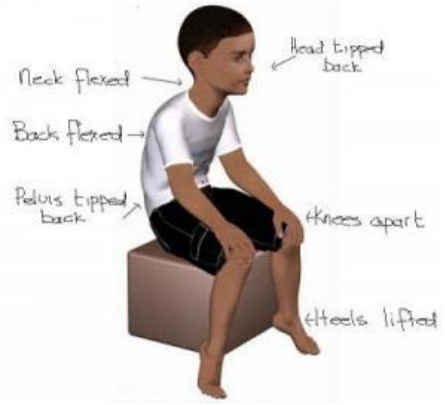
Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
5 minutes	Introduction/Overview	PowerPoint
15 minutes	Therapies and how Postural Devices Can Help :This course will cover specific devices and how they are used in the context of several different therapies. We will discuss challenges we have faced when working with children in our field and possible ways these devices can help alleviate these struggles.	PowerPoint
5 minutes	Group Dialogue on Challenges Faced and Devices That Might Help	
15 minutes	Activity Case Study Assessment and Device Prescription :Participants will be given case studies wherein they will identify the patient's current developmental level, ideal developmental level, current goals and biggest challenges so they can develop an "action plan" for moving them further in their therapy.	Activity Materials
10 minutes	Group Discussion on Activity	
5 minutes	Conclusion	
5 minutes	Extra Time Available if Another Section Goes Too Long	

3 POSTURAL DEVICES IN THERAPEUTIC SETTINGS

INSTRUCTIONS: (1) Divide into groups, (2) Each group will be assigned a case study, (3) Choose a postural device and complete the chart, and (4) Present your findings to the entire group.

Samantha: Cerebral Palsy/Scoliosis (13 yrs.)	What postural device(s) would you prescribe?
Problem: Trunk instability **Sensation**: Full sensation **Mobility**: Non-Ambulatory **Muscle Tone**: Hypertonia/High spasticity **Sitting Balance**: Sits independently, but not upright **Goals**: ADL (OT); School attendance   	Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration:

Kyle: Down Syndrome (3 yrs.)	What postural device(s) would you prescribe?
Problem: Trunk instability **Sensation**: Decreased sensation **Mobility**: Semi-ambulatory **Muscle Tone**: Hypotonia **Sitting Balance**: Sits independently, but not upright **Goals**: Fine motor (OT); Feeding/Swallowing & Speech Production (ST)  	Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration:

Sarah: Spina Bifida (6yrs.)	What postural device(s) would you prescribe?
Problem: Developmental delay, Scoliosis **Sensation**: Partial sensation **Mobility**: Semi-Ambulatory **Muscle Tone**: Typical **Sitting Balance**: Sits independently, poor balance **Goals**: Walking (PT), Peer interaction at school 	Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration: Device: Function: Goal: Frequency/Duration:

Lesson III: Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder

Department: Thai Traditional Medicine

Learner Objectives

Trainees will be able to early identification of needs, and how to do basic Thai massage to support children with Cerebral Palsy and Autism Spectrum Disorder

Lesson Content

Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder	180 minutes

Course 3: Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder

Concept

Thai massage draws significant influence from India's ancient Ayurvedic traditions of medical practice. Pediatric Thai Traditional massage and nurturing touch are the most appropriate massage techniques to use in Children with Cerebral Palsy and Autism Spectrum Disorder. When using massage therapy for children need to achieve its maximum potential.

Learning Objectives

Trainees will be able to

1. Understand the methods of the Thai massage and explain the potential benefits of Thai Massage
2. Early identification of needs, and how to do basic Thai massage to support children with Cerebral Palsy and Autism Spectrum Disorder
3. To select the assessment tools to evaluate the children with cerebral palsy and autism spectrum disorder.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
20 minutes	Introduction/Overview The speaker gives a lecture on Thai Traditional Medicine clinical practices guidelines for children with cerebral palsy and autism spectrum disorder.	Manual of the clinical practices guidelines for children development evaluation with CP and ASD
60 minutes	1. The speaker describes the method of Thai massage therapy and early intervention for children with cerebral palsy and autism spectrum disorder. 2. The speaker gives a lecture on the evaluation and follow-up care for children with cerebral palsy and autism spectrum disorder.	Materials for children developmental evaluation
90 minutes	Practices for the Thai massage therapy by choosing materials and steps of Thai massage.	Materials for Thai massage therapy
10 minutes	1. The speaker concludes the method of Thai massage therapy and the evaluation for children with cerebral palsy and autism spectrum disorder. 2. To spend that time for asks and questions	

Handout

Thai massage draws significant influence from India's ancient Ayurvedic traditions of medical practice. Ayurvedic medicine, also a holistic form of healing, plays an integral role in the practice of both Hinduism and Therevada Buddhism. Monks and similar practitioners of healing transmitted Ayurvedic techniques to Thailand some 2,500 years ago, thus giving birth to the wonderful phenomenon that is Thai massage. Rhythmic compressions, rolling of limbs, and gentle rocking are Thai massage methods employed in order to relax and realign energies in the body. Varying amounts of pressure are applied to energy lines (or 'Sen') along the body in accordance with the Ayurvedic principles of balancing one's energy. It involves the application of pressure on various energy lines and points. In addition to assisting relaxation, Thai massage also increases the flow of energy and flexibility while stimulating internal organs to perform properly. In both Eastern and Western healing systems, the concept of maintaining balance or equilibrium is considered crucial to good health. 'Sen' are considered passages for energy, and correspond with blood vessels in the body. Traditional Thai healing practices suggest that when the 'Sen' become blocked, energy grows stagnant and the body loses its balance, leading to a range of ailments. Thai massage acts as an external stimulant to produce specific internal effects within the body, both freeing energy from obstruction and preserving health and harmony. Massage of all types is often used to relieve stress and protect against stress-related health issues. It is also said to boost energy and improve range of motion and flexibility. Thai massage, in particular, is said to benefit or ameliorate many different health problems. Specifically, it may: relieve tension headaches, reduce types of back pain (typically subacute and chronic nonspecific back pain), relieve muscle pain and spasticity as well as joint stiffness and pain, increase flexibility and range of motion, stimulate circulation and lymphatic drainage, boost energy, calm the nervous system.

Thai massage for babies is about the adaptation of principles and methods in order to provide appropriate healing. There are various outstanding characteristics of Thai massage that are ideal for healing and recovering children’s health, allowing them to move their bodies better. Massaging reduces muscle contraction and stimulates blood circulation and other systems in the body to work better, for example; respiratory, digestive system, and defecation. Babies will be able to sleep easier and longer. Parents or child caretakers can practice Thai massage and try to do it at home.

Babies who are touched and receive massage regularly will have strong body and muscle structure, their bodies will be flexible leading to ample movement development. In addition, babies will be happy and mostly in good mood leading to well brain development and they will be ready to learn. Parents are advised to touch their babies since birth, touching is the basis of the enhancement of emotional and intellectual development.

Massage Principles

Pressure used in the massage

Giving a massage to babies is different than giving a massage to adults; it is not focused on pressuring or squeezing but touching gently. Each spot is required different hand position in order to allow the pressure’s degree apply to the muscle appropriately. The massage is given by gently pressing and holding down for a moment (counting from 1-5 or about 5-10 seconds.

Preparation before giving a massage and positions

Since children in special group have more complex emotional conditions, therefore the readiness of both emotion and body is required:

1. Children are relaxed, no stress, not resist when being touched.
2. Children are not ill such as having temperature higher than 38° C or having a diarrhea.
3. After-meal massage is not allowed. Should start at least 30 minutes after meal.
4. There different positions including sitting, supine and sideway positions based on children's muscle and body conditions. Sitting position is ideal for shoulder and back muscle massage while supine and sideway positions are good for any part of the body. For disabled children who cannot sit will receive a massage in a supine position and will be flipped sideways to receive shoulder and back massage.

- *Supine position*: use a pillow to support the head and the shoulder blade in a slightly bend position, if there is a contraction and cannot lay legs flat against the floor, use a pillow to support underneath the knees
- *Prone position*: use a bolster or a blanket to support the chest and armpit areas.
- *Sideway position*: use a pillow to support legs, bend the hip and knees and use another pillow to support the back
- *Sitting position*: sitting by stretching legs forward or sitting with crossed legs. If there is a contraction and cannot sit with crossed legs, recommend to sit with stretch legs or bending the knees by having both feet touches each other. Hold on the child's shoulder and gently pushing the body forward, put a small bolster laying across the chest area and put the child's arms on the bolster and stretch them forward.

Muscle stretching before massage

1. Arm muscle stretching

Position 1: stretch thumbs and four fingers while gently tilting one hand up and down and stretching one arm all the way out, hold still and count to ten, do 10 times for each side.
Position 2: Hold a wrist and an elbow, raise the arm above the head, hold still and count to ten, lift the arm down, do 10 times for each side.

2. Leg muscle stretching

Position 1: Hold knee joint, slowly pushing in order to bend the knee and hip, hold still and count to 20, do 10 times for each side.
Position 2: Hold an one ankle and stretch the other knee while raising it as high as possible, hold still and count to 20, then slowly lift it down. Do 10 times for each side.
Position 3: Hold the side of the knee, use the other hand to tilt the ankle up, hold still and count to 20, stretch the leg, do 10 times for each side.
Position 4: Hold the ankle and use the other hand to stretch the knee, then slowly spread it to make 45 degrees, hold still and count to 20, then gently move the leg back, do 10 times for each side.

Let's Massage Your Little Ones

1. Face massage: Stimulate the efficiency of orbicularis oris and pharyngeal muscles.
   - Press the end of the eyebrow with thumb and move to eyebrow's tail gently. Do the same with another eyebrow.
   - Put the thumbs at the center of above upper lip and move along to the end of lip. Then, put the thumbs at the center of the chin and move to the end of lower lip.
   - Press the thumb at the chin groove under the lower lip for 10 seconds. Repeat 5 times.

2. Neck massage: Reduce muscular tension and enhance the efficiency of neck muscles strength.
   - Put the baby in prostate position and grope the muscle upward slowly 10 times a day (do not press on the backbone and cervical region).

3. Shoulder massage: Reduce deltoid muscles tension.
   - Put the baby in sitting or prostate position and put the palm on both deltoid muscles. Press the fingertips from the neck base to shoulder for 3-4 times with both shoulders.

4. Back massage: Reduce back muscles tension to relieve the baby.
   - Lie the baby on one side or on the stomach. Grope the back muscles along the side of backbone with palms from the shoulder to the hip. Then, massage with the pointing down thumbs along the erector spinae, not on the backbone, for 10 seconds upward and downward. Repeat for 4-5 times and switch to another side.

5. Arm massage: Reduce the contraction of arm muscles.
   - Lie the baby on his back with the hands over the head. Press the fingers to massage under the armpit.
   - Stretch the arms with the palms turn up. Press the muscle with thumb at the center of upper and lower arm to the wrist (not the foldable joints and elbows). Then, overturn the palm while the arm stretches. Press the thumb at the center of the arm 3-4 times for both arms.

6. Leg massage: Reduce the contraction of lag muscles.
   - Lie the baby on his back. Press the thumb and massage along the muscle line for 10 seconds for all four spots without pressing on the bone. Repeat it 4-5 times for each line.

Line 1 Tibia line from under the keen to the ankle
Line 2 Upper thigh line
Line 3 Lower thigh line (along the trouser stitch)
Line 4 Lower leg line from under the knee to talus.

7. Fingers and toes massage: Reduce the contraction of knuckle and increase the function efficiency of Fine Motor Adaptive.
   - Open the hands and spread out the fingers. Press and massage each knuckle. Then, press the thumb on the center of the palm for 10-15 seconds.

8. Stomach massage: Activate digestive system and relieve constipation.
   - Lie the baby on his back and put the hand on the stomach and press with the fingertip clockwise around the navel for 4-5 rounds.

Herbal Compress

Herbal compress is always used after finishing Thai massage. The heat from a herbal compress ball is absorbed into skin which helps to relieve muscles and tendons, and minimize ankylosis problem.

Compress process

- Set a good position and test the heat of compress ball with the forearm.
-Quickly put the compress ball and remove it repeatedly until it is getting cooler. Then, put and press it on the required spot for a while.

How to make herbal compress ball

Material and equipment

- A chopping board
- A knife
- Herbs
- 2 pieces of calico for wrapping
- One-meter long strings x2
- Steaming pot
- Bowl, gloves, and towel
- Tray

Herbs for making herbal compress ball

Items	Name	Qty.	Properties
1	Cassumunar ginger	500 g.	Relieve pain, reduce inflammation, heal bruise and swelling, contain carminative property to sooth colic, cure beriberi, stomachache, heal wound and intestine, treat leucorrhoea, flatulence and constipation
2	Kaffir lime skin and leaf	200 g.	Heal dizziness, contain carminative property, nourish heart, cure colic
3	Lemongrass	100 g.	Cure constipation and flatulence
4	Tamarind leaf	300 g.	Relieve itching, nourish skin
5	Curcumin	100 g.	Minimize inflammation, cure skin disease, relieve fever, reduce phlegm, heal diarrhea, wound, itching, drive out body waste, control body essence, treat pink eyes
6	Salt	1 tbsp	Absorb heat and act as a conductor to allow the basis into skin
7	Camphor	2 tbsp	Give scent and nourish heart
8	Acacia concinna	100 g.	Nourish skin, heal skin disease, reduce pressure

Method of making herbal compress ball

1. Wash all herbs and chop them in pieces and pound well. Add salt, borneo camphor, and camphor and mix well. Divide into 2-3 portions.
2. Put the portion in the center of the calico. Fold the cloth from the two corners before folding another two corners.
3. Arrange it well and make it in round shape before binding with string and tighten it.
4. Making the handle by overlapping the edge of cloth. Then, fold it to hide the edges.
5. Then, fold the end to make the handle. Tie the end of the same string as a fast knot.
6. Hide the end of string in the fold of handle to make the ball stronger, more beautiful, and enduring. To do this it helps to make the string properly.

Lesson IV: Sensory Integration and Snoezelen

Department: Occupational Therapy

Learner Objectives

Trainees will be able to

1. Knowing and applying Sensory Integration for Children Special need
2. Knowing basic information Short Sensory Profile, and applying Short Sensory Profile for children with special need
3. Knowing basic information on Snoezelen, and applying Snoezelen for children with special needs

Lesson Content

1.	Sensory Integration for Children Special need	60 minutes
2.	Short Sensory Profile, and applying Short Sensory Profile for children with special need	60 minutes
3.	Snoezelen for children with special needs	60 minutes

Course 4: Sensory Integration and Snoezelen

Concept

This course discusses the unique considerations and issues to consider when working with individuals on the autism spectrum who have sensory integration difficulties, further refines participants' knowledge in a particular practice area by delving into special considerations, principles and intervention techniques as they apply to clinicians and clients in school settings.

Learning Objectives

Trainees will be able to

1. Knowing basic information Sensory Integration, applying Sensory Integration for children with special need, and apply Sensory Integration to general practice
2. Knowing basic information Short Sensory Profile, and applying Short Sensory Profile for children with special need
3. Knowing basic information on Snoezelen, and applying Snoezelen for children with special needs

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
30 minutes	Introduction/Overview The speaker gives a lecture on Introduction Sensory Integration, the senses, and integration of senses	Powerpoint
30 minutes	Workshop on Sensory Integration for Individuals on the Autism Spectrum Disorder	
30 minutes	The speaker gives a lecture on apply the Sensory Integration, principles in evaluation and intervention	Powerpoint
30 minutes	Introduction Short Sensory Profile (SSP), how to score & interpret SSP	Powerpoint
60 minutes	Introduction Snoezelen, Snoezelen history, and Snoezelen with children with special needs	Powerpoint

Handout
What is Sensory Integration?

Sensory integration theory was originated by Dr. A. Jean Ayres, the occupational therapist and psychologist, whose research and love for children has inspired many therapists to educate themselves with respect to the neuroscience and influence of environmental stimuli on developing children. Sensory integration has a long history of research and with that, a significant amount of controversy.

Sensory Integration, simply put, is the ability to take in information through our senses (touch, movement, smell, taste, vision, and hearing), put together with prior information, memories, and knowledge stored in the brain, and make a meaningful response. It is a nonlinear process that is dependent upon the efficient integration of all the sensory experiences mixed with the environmental situations and demands and the child' own personality and reactions. Normal sensory integration allows the child to interact appropriately within his environment.

Sensory integration occurs in the central nervous system (CNS) and is a neurological process that happens with little conscious attention or effort. The process is multifaceted and very complex. It requires the integration of external information within the brain and the ability to use this information functionally through appropriate adaptive response.

Sensory integration is believed to take place in the midbrain and brainstem levels in complex interactions with the parts of brain that are responsible for development: coordination, attention, arousal levels, autonomic functioning, emotion, memory, and higher-level cognitive function.

Sensory integration deals with how the brain processes sensory input from multiple sensory modalities. These include the five classic senses of vision (sight), audition (hearing), tactile stimulation (touch), olfaction (smell), and gustation (taste). Other sensory modalities exist, for example the vestibular sense (balance and the sense of movement) and proprioceptive (the sense of knowing one's position in space). Important is that the information of these different sensory modalities must be relatable. The sensory inputs themselves are in different electrical signals, and in different contexts. Through sensory integration, the brain can relate all sensory inputs into a coherent percept, upon which our interaction with the environment is ultimately based Sensory integration provides a crucial foundation for later, more complex learning and behavior.

In order to achieve developmental milestones, children must first be able to intake sensory input, process it, and then respond appropriately within seconde. For most of us, effective sensory integration occurs automatically and subconsciously, without effort. We do not tend to think of all the movements necessary to perform efficiently throughout our day it would be exhausting.

In the normally developing child, sensory integration occurs when the child participates in everyday activities. The child’ love for sensory activities fuels an inner drive and motivation to conquer challenges. That drive urges the child to participate actively in experiences that promote sensory integration: The child explores the environment, tries new activities, and strives to meet increasingly more complex challenges. Mastering new challenges makes the child feel successful and gives him the confidence to try more difficult tasks.

The Senses

The sensations that the nervous system recognizes are touch, sight, hearing, smell, taste, and the hidden senses that are body position (proprioceptive) and movement (vestibular).

Tactile or touch sense is located in the skin and mouth. Its influences are pervasive, and it affects how we see our world. By processing touch information, we feel safe, that make us to bond with others and develop socially and emotionally. The tactile system comprises the discriminatory and protective system.

- The discriminatory system allows us to determine what we are touching and to. define characteristic of objects. Moreover, it tells us when and where we are touched.
- The protective system tells us when we are in contact with something dangerous or · threatening. It causes a fright, flight, or fight response, which involves the whole mind and body.

Proprioceptive or body position is located in our muscles and joints. It is an unconscious sense that detects where our body parts are in space and how they are moving. Proprioceptive information gives us a clear map of how our body is put together. It defines our internal body awareness and allows us to appreciate how our body relate to the external environment. It tells us how hard we are pushing or touching things and allows us to gauge how much pressure we need to perform any given task. Proprioceptive results from joint traction, compression, or resistance to movement, which occurs during heavy work or play sessions when weights are use or when children use their own body weight as resistance.

Vestibular or the sense of movement. Vestibular sensory receptors located in inner ear. It detects our head movements relative to gravity and provide information about gravity, balance and movement. Vestibular sense tells us whether or not we are moving, how quickly, and in what direction. It provides us with the sense of safety that can come only from knowing our feet are planted firmly on the ground. It also gives us a physical reference that can help us make sense of visual information, particularly where we are in relationship to other thing in our environment, and how other objects relate to each other. The Vestibular system has a role in body awareness, position in space, postural tone, coordination and equilibrium. It also plays a part in the stabilization of eyes in space during movement Vestibular input contributes to our sense of balance, head control, eye gaze, coordination of two side of the body, muscle tone, and posture and contributes a child having core stability both physically and emotionally. Vestibular system has the power to influence our nervous system and has a direct impact on our arousal.

- Fast movement wake us up
- Slow rhythmic movements put us to sleep
- Linear, straight-up-and-down/forward and backward movement such as jumping on trampoline make us to be organize
- Rotary movement such as spinning or turning in a circle can have an alerting and sometimes disorganizing effect.

Integration of Senses

One of the earliest sensations is the olfactory sensation. Evolutionary, gustation and olfaction developed together. This sensory integration was necessary for early humans in order to ensure that they were receiving proper nutrition from their food, and also to make sure that they were not consuming poisonous materials. There are several other sensory integrations that developed early on in the human evolutionary time line. The integration between vision and audition was necessary for spatial mapping. Integration between vision and tactile sensations developed along with our finer motor skills including better hand-eye coordination. While humans developed into bipedal organisms, balance became exponentially more essential to survival. The sensory integration between visual inputs, vestibular (balance) inputs, and proprioceptive inputs played an important role in our development into upright walkers.

The senses never work in isolation. Each sense works with others to form a composite picture of who we are, where we are, and what is going on around us. Sensory integration is crucial in producing this composite picture. The sensory information enters the nervous system and is integrated with other sensory, environmental, and experiential information. For example:

- tactile information integrates with visual perception. As children learn the spatial qualities of an object through touch, they connect it to the visual image they perceive, learning visual-spatial concepts that will eventually be important for reading and writing
- tactile combines with proprioceptive information (touch receptors and joint receptors) to help children discern their movements and relationship to other objects. The combination of these senses allows children to identify with their fingers objects hidden deep in their pockets and to exert the appropriate pressure to avoid braking toys or tearing the paper when writing. The combination also tells us unconsciously how our tongue is moving to articulate sounds.
- Vestibular combines with propriceptive and tactile information to give children a good body scheme and awareness of how they are moving through space. It provides a foundation that allows the child to move in smooth, coordinated fashion.

Applying the Sensory Integration Principles in Evaluation and Intervention

Sensory integration theory is applied within the guideline of overall professional practice. This following outline provides a step-by-step process for using this frame of reference in occupational therapy.

Step 1 Evaluation: create an occupational profile

- identify and document the occupation-related concerns

Step 2 Evaluation: evaluate occupational performance

- identify and document the sensory integration and praxis issues

Step 3 Intervention: plan intervention

- identify and document the therapeutic action plan

Step 4 Intervention: target outcomes

- Identify and document objectives and goals linking engagement in needed and desired activities with areas that can be addressed through specific intervention strategies.

Step 5 Intervention: implementation

- implement the plan in the target areas for person/activity/environment
- direct client interaction
- therapeutic activities
- environment modifications
- document the ongoing results of the therapeutic dynamic assessment

Step 6 intervention: review

- evaluate and document the result of the intervention
- document achievements in identified areas
- document achievements in reported areas, including the impact of therapy on the occupation and co-occupations of the family

Note: Although practice dose not proceed in this sequence, the steps provide a guide for the clinical process. In addition, it is common that more than one frame of reference will be employ in the therapeutic process.

Evaluation for a Child with Sensory Integrative Problems

Children's behaviors give us concrete clues about their sensory processing. Their likes, dislikes, persistence (or lack of it) at a task, emotional responses, motor coordination, and language are all integral parts in assessing their processing. Their behaviors, or output, serve to objectify what we can not see occurring within the nervous system (sensory processing).

Through tracking children's behaviors we can obtain a clear view of how they respond to sensory information. This requires meticulously listing children's behaviors, desires or obtaining behaviors, and dislikes or avoidance behaviors and correlating these behaviors with the appropriate sensory system. This information can be used to determine how children process sensory stimulus or discriminate sensory information.

Observing the children's behavior and behavior checklists or questionnaires are methods of obtaining needed sensory information. For example, The Sensory Profile is a standard method for professionals to measure a child's sensory processing abilities and to profile the effects of sensory processing on functional performance in daily life of the child. It is a judgment-based on caregiver questionnaire. Also for the Short Sensory Profile(SSP) that is developed by the team of researchers in Colorado. They developed SSP for help service providers in screening setting quickly identify children with sensory processing difficulties so that these children could be referred for comprehensive assessment and effective intervention planning.

Evaluations consist of both standardized testing and structured observations of responses to sensory stimulation, posture, balance, coordination, and eye movements. The therapist conducting the testing may also observe spontaneous play.

Sensory Integrative Intervention

Sensory integrative (SI) Intervention is designed to address the underlying problems in sensory processing. SI interventions must be differentiated from sensory diets. Sensory diets, while addressing the sensory system, do not meet the essential characteristics of a sensory integration treatment. Sensory diets teach compensatory strategies that are effective in altering arousal levels and are based on sensory integrative principle. However, sensory diets are not the same as sensory integrative intervention.

The essential characteristics of sensory integrative intervention include:

- The primary goals of SI therapy must aim at improving the underlying neurological process, rather than teaching a skill.
- The child must be an active participant and activities should be primarily child directed and intrinsically motivating.
- The intervention is individualized to meet the developmental needs and goals of the client.
- The activities must be purposeful, provide the “just-right challenge,” and result in an adaptive response.
- The activities provide enhanced sensory feedback with emphasis on tactile, proprioceptive, and vestibular systems.

When creating an intervention plan, carefully consider all aspects of sensation and their influence on behavior. If the child has difficulty with one or more of the various aspects of sensory integration, consider how deficits in sensory processing, and posture, bilateral integration and sequencing, and praxis influence the child's behavior. An effective intervention plan is one that maximizes the use of sensations that the child processes well, enabling the child to gain and maintain a positive emotional and arousal state, and provides additional feedback that will enhance information processing and skill development.

Intervention using sensory integration theory mimics natural physical play and tab into the innate nature of the child to learn and grow. Integration is a dynamic process, allowing the child to make an impact on and accommodate experiences in an ever-changing environment.

Traditionally, sensory integration intervention strategies are applied in a sensory-rich environment with colorful and inviting swings, mats, balls, and toys. Given adequate and appropriate resources, the clinic environment provides affordances rich in the sensory opportunities and organized, but flexibly arranged area, making it optimal for providing therapy. This environment enables the child to safety run, jump, swing, crash, and land, and entices the child to play and challenge his or her skills and abilities. A hallmark of intervention using sensory integration is focus on the tactile, vestibular, and propriceptive sensation to improve function.

Determining the Effectiveness of Intervention

The therapist using a sensory integrative approach to intervention focuses on outcomes in occupational engagement and social participation. Through dynamic assessment, the therapist continuously considers the intervention plan, the goals and objectives, and the child's responses.

During intervention, the therapist considers the interrelationships between sensory processing, skill, self-regulation, and organization of behavior as they relate to occupational performance and participation with others, and modifies the intervention as necessary. Specific outcomes can be measured through structured and unstructured evaluations at specified intervals to objectively measure performance.

Short Sensory Profile

Children's behaviors give us concrete clues about their sensory processing. We can obtain a clear view of how they respond to sensory information through tracking children's behaviors. Observing the children's behavior and behavior checklists or questionnaires are methods of obtaining needed sensory information.

The Short Sensory Profile (SSP) that is developed by the team of researchers in Colorado. It is the short form of the Sensory Profile. The SSP is developed for helping service providers in screening setting quickly identify children with sensory processing difficulties so that these children could be referred for comprehensive assessment and effective intervention planning.

There were three phases in the development of SSP. First phase is identifying a smaller set of items that met specific psychometric and construct criteria from the full Sensory Profile. The next phase is refining the item pool by evaluating the structure of the scale across sample. The last phase is cross-validating the revised structure to select the final set of items for the SSP. SSP contains 38 items that are from 7 sections of Tactile sensitivity, Taste/Smell sensitivity, Movement sensitivity, Under responsive/Seeks sensation, Auditory filtering, Low energy/Weak, and Visual/Auditory sensitivity. SSP was designed to be self-explanatory for caregivers. These are all the 38 items 7 sections in SPP.

Item	Tactile Sensitivity
1	Expresses distress during grooming (for example, fights or cries during haircutting, face washing, fingernail cutting)
2	Prefers long-sleeved clothing when it is warm or short sleeves when it is cold
3	Avoid going barefoot, especially in sand or grass
4	Reacts emotionally or aggressively to touch
5	Withdraws from splashing water
6	Has difficulty standing in line or close to other people
7	Reacts emotionally or aggressively to touch
Item	**Taste/Smell Sensitivity**
8	Avoid certain taste or food smell that are typically part of children's diets
9	Will only eat certain taste (list: .....)
10	Limits self to particular food texture/temperature (list: .....)
11	Picky eater, especially regarding food texture
Item	**Movement Sensitivity**
12	Becomes anxious or distressed when feet leave the ground
13	Fears falling or heights
14	Dislikes activities where head is upside down (for example, some salts, roughhousing)
Item	**Under responsive/Seeks sensation**
15	Enjoys strange noises/seek to make noise for noise's sake
16	| Seeks all kinds of movement and this interferes with daily routines(for example, can’t sit still, fidgets)
17	Becomes overly excitable during movement activity
18	Touches people and objects
19	Doesn't seem to notice when face or hand messy
20	Jumps from one activity to another so that it interferes with play
21	Leaves clothing twisted on body
Item	**Auditory Filtering**
22	Is distracted or has trouble functioning if there is a lot of noise around
23	Appears to not hear what you say(for example, does not “tune-in” to what you say, appears to ignore you)
24	Can't work with background noise (for example, fan, refrigerator)
25	Has trouble completing tasks when the radio on
26	Doesn't respond when name is called but you know the child's hearing is OK
27	Has difficulty paying attention
Item	**Low Energy/Weak**
28	Seem to have weak muscle
29	Tires easily, especially when standing or holding particular body position
30	Has a weak grasp
31	Can’t lift heavy objects (for example, weak in comparison to same age children)
32	Props to support self (even during activity)
33	Poor endurance/tires easily

Item	Visual/Auditory Sensitivity
34	Responds negatively to unexpected or loud noise (for example, cries or hides at noise from vacuum cleaner, dog barking, hair dryer)
35	Holds hand over ears to protect ears from sound
36	Is bothered by lights after others have adapted to the light
37	Watches everyone when they move around the room
38	Covers eyes or squints to protect eyes from light

To filled out this questionnaire the caregiver has to describes the frequency with which the child does all the behaviors that listed in SSP, by using these following key to mark the responses.

- **Always:** When presented with the opportunity, the child always responds in this manner, 100% of the time.
- **Frequently**: When presented with the opportunity, the child frequently responds in this manner, 75% of the time.
- **Occasionally**: When presented with the opportunity, the child occasionally responds in this manner, 50% of the time.
- **Seldom**: When presented with the opportunity, the child seldom responds in this manner, 25% of the time.
- **Never**: When presented with the opportunity, the child never responds in this manner, 0% of the time.

To complete SSP the caregiver should take time about 10 minutes. Although the SSP was designed to be self-explanatory for caregivers, it is important that the therapist become familiar with all of the items on SSP in case the caregiver has the question. If the caregiver ask question, provide clarification without indicating a “correct” response. Encourage the caregiver to consider how frequently the child engage in the behaviors of interest. It may be helpful to have the caregiver use the item in a sentence with the child's name (e.g; Jimmy frequently “has difficulty paying attention”). This will help the caregiver identify and link the child's behaviors to the statements presented on SSP. These are three general ways in which you can administer the SSP:

1. Send the short form to the caregiver with cover letter explaining the purpose of the instrument. Be sure to include your phone number in case the caregiver has question about the form.

2. Have the caregiver complete the questionnaire in your office or clinic while you are evaluating the child.

3. Help the caregiver fill out the SSP. Use this procedure if the caregiver has difficulty reading because of language differences or reading disability.

Emphasize the important of complete all the items. Explain to the caregiver you will fill in the section raw score. Once the caregiver has complete the form, make sure that all items have been answered. If the caregiver has left any item blank, ask him or her to complete the item.

How to score the SSP?

After you asked the caregiver filled out the response all of the items, you have to score each response according to the following chart:

- Always =1 point
- Frequently = 2 points
- Occasionally = 3 points
- Seldom = 4 points
- Never = 5 points

If the caregiver places a mark between two categories, record the more frequent score:

- Between Never and Seldom, record Seldom(4 points)
- Between Seldom and Occasionally, Occasionally record(3 points)
- Between Occasionally and Frequently, record Frequently (2 points)
- Between Frequently and Always, record Always (1 point)

Frequent behaviors receive lower score; therefore, children get lower scores for undesirable performance and higher scores for desirable performance. If any item is left blank, a raw score total for that section can not be compute. After you scored all the response, then compute the score for each section. To determine the section row score total. Write this score in the box labeled Section Raw Score Total.

Summarized all the section row score total on the Summary Section of SSP (on the back of SSP at the bottom of the page). Transfer the child's score for each section to the column labeled Section Raw Score Total. Calculate the SSP raw score total by adding all the section totals. Write the SSP raw score total in the box labeled Total. Plot the section raw score totals and the SSP raw score total by marking an X in the appropriate classification column: Typical Performance, Probable Difference, and Definite Difference. (for example, how to summarized the SSP see figure below)

Sesion				
Tactile Sensitivity	19 / 30	35 ------ 30	29 –----- 27	
Taste/Smell Sensitivity	13 / 20	20 ------15	14 –-x--- 12	
Movement Sensitivity	14 / 15	15 –-x--- 13	12 –----- 11	
Under responsive/seek Sensitivity	29 / 35	35 –-x--- 27	26 –----- 24	
Auditory Filtering	24 / 30	30 –-x--- 23	22 –----- 20	
Low Energy/weak	27 / 30	30 –-x---26	25 –----- 24	
Visual/Auditory Sensitivity	17 / 25	25 ------- 19	18 –-x--- 16	
Total	143 / 190	190 -------155	154 –-x--- 142	

How to Interpret the SSP?

The SSP Summary was constructed to make it easy for the examiner to determine whether a score is consistent with good sensory processing or is a score that indicates some difficulty with sensory processing. For the SSP the most important score is the total score. It provide the examiner with a clear indication of the child's sensory processing ability.

- Typical Performance: section raw score totals that fall within this range indicate typical sensory processing abilities.
- Probable Difference: section raw score totals that fall within this range indicate questionable areas of sensory processing abilities.
- Definite Difference: section raw score totals that fall within this range indicate sensory processing problem.

When a child obtains a score in the Definite Difference range, it is likely that this child does not process sensory information like others and may be struggling to keep up on what is going on in the environment or may be disruptive to self and others. The unusual behaviors that commonly are reported in children who obtain a poor SSP score (e.g., Definite Difference or Probable Difference) represent that child's attempt to manage daily life with inaccurate or insufficient sensory information. Although many of these behaviors are considered weird or maladaptive, it is important to recognize that from a sensory processing perspective. In the child who received a Definite Difference score and Probable Difference on the SSP is recommended to have a follow-up assessment. It would be appropriate to use the long form of the Sensory Profile. Because it provide more detailed information about sensory processing.

Snoezelen

The Snoezelen environment is safe and non-threatening. Children and adults with disabilities or other limiting conditions enjoy gentle stimulation of the primary senses. There is no need for intellectual reasoning. Participants experience self-control, autonomous discovery, and exploration achievements that overcome inhibitions, enhance self-esteem, and reduce tension. Free from the expectations of others and away from the pressures of directed care, they recuperate and relax. Research has shown that multi-sensory environments offer a wealth of benefits, often affording the participant and caregiver an opportunity to improve communications, enhance their understanding of each other, and build trust in their relationship. Snozelen is a wonderful experience to enjoy and share-a place that replenishes the spirit.

Snoezelen History

The concept of Snoezelen was defined in the late 1970's by two Dutch therapists, Jan Hulsegge and Ad Verheul. While working at the De Hartenberg Institute in Holland, a center for people with intellectual disabilities, the two therapists learned of the positive responses a colleague was able to elicit from his severely challenged clients while exposed to a sensory environment he had assembled. Hulsegge and Verheul set up an experimental sensory tent at their annual summer fair to further test the idea. Constructed simply as a roof on poles with plastic sheeting dividers, this first sensory tent: was filled with simple effects such as a fan blowing shards of paper, ink mixed with water and projected onto a screen, musical instruments, tactile objects, scent bottles, soaps, and flavorful foods. It was a tremendous success, especially with low-functioning clients who demonstrated positive verbal and nonverbal feedback. The following summer, Hulsegge and Verheul built another creation within the center. They also gave the concept a name: the word "Snoezelen", a contraction of the Dutch verbs "snuffelen" (to seek out or explore) and "doezelen" (to relax). News of the

successful experiments at De Hartenberg quickly generated interest across Europe. Impressed by what they saw in Holland, many therapists began creating permanent and semi-permanent "Snoezelen" rooms at their centers. During this time, the selection of commercially available products for use in Snoezelen was limited and mostly adapted from other purposes. This changed when ROMPA International, a company based in the U.K., created a full range of products specifically designed to interact with clients and elicit sensory response. Since then, Snoezelen continues to grow in sophistication, using state-of-the art technology to provide wonderful, intriguing spaces with lights, sound, aroma, tactile surfaces, moving images, and other sensory experiences. Snoezelen is now used widely in education and care settings for children with disabilities and autism spectrum disorders. Encouraging results have also been shown with the elderly suffering from dementia such as Alzheimer's, for people with mental illness, as well as for those in chronic pain, with challenging behaviors, acquired brain injury, and other conditions. In addition, Snoezelen is gaining momentum in the mainstream population as an antidote to stress. It is making a real, tangible difference in the quality of life of people with disabilities and other limiting conditions in schools, nursing homes, day programs, hospices, mental-health centers, and many other facilities. And, it is transcends age ranges and abilities to offer therapy professionals and caregivers the chance to discover how specially tailored, population-specific multi-sensory experiences can benefit individual clients. Whether used for therapeutic gain, motivation, encouragement, pain reduction, anger management, stress relief, or simply for recreational pleasure and relaxation, research validates that the absorbing environment created by Snoezelen can effect positive, real, and. sometimes lasting change in mood, behavior, and relationships. Here are a few sample settings in which Snoezelen has proved to be a highly effective tool.

Snoezelen and Children with Special Needs

Throughout the world, more work has been done and more good achieved with special needs children than in any other area of Snoezelen practice. The body of experiential evidence of the benefits of Snoezelen for this client group is enormous and continues to grow. In educational settings, Snozelen rooms are being used as "neutral territory", where relationships can be established away from the stress of the classroom. At Addlington School in Reading, England, teaching staff find their sensory room an "invaluable resource...useful or a wide range of ages and abilities and a varied curriculum". A 1994 German study concluded, "Snoezelen causes an increase in motivation to succeed and an improvement in concentration and coordination." Multi-sensory stimulation has been one of the most common and successful approaches to learning disability for some time, especially since it was established that sensory work has an impact in the educational, as well as, the therapeutic arena. Snozelen is the logical development of well documented work carried out over many years, taking advantage of new technologies not previously available. There is a growing recognition of the need of clients with learning disabilities for leisure. The benefits of the nondirective undemanding Snozelen approach are now both widely accepted and borne out by research. Snoezelen is being used in practice as a means of nonverbal communication as a setting for relaxation and self-healing and to provide stimulation for those who would otherwise be almost impossible to reach. Snoezelen has been found to be equally effective in working with people with autism or autistic characteristics. Research carried out in Brussels compared the behavior of nine adult clients with profound autism in both classroom and Snoezelen settings. Though individual results varied, the group results showed a fifty percent reduction in distress and stereotypical behavior, and seventy-five percent less aggression and self-injury in the Snoezelen environment.

Lesson V: Applied Speech Therapy for Children with Autism

Department: Speech therapy

Learner Objectives

Trainees will be able to

1. To be knowledgeable in the abnormality quality of the language and speech development for autistic children
2. To be knowledgeable in the evaluation and the support of the language and speech development for autistic children and be able to give suggestions for parents

Lesson Content: Applied Speech therapy for children with autism 60 minutes

Course 5: Applied Speech Therapy for Children with Autism

Concept

For the support for children having basic expressive language difficulties, the trainer needs to be knowledgeable and understanding in the correct principles including selecting techniques and correct methods accordant with the objectives of the speech and language developmental behaviors.

Learning Objectives

Trainees will be able to

1. To be knowledgeable in the abnormality quality of the language and speech development for autistic children
2. To be knowledgeable in the evaluation and the support of the language and speech development for autistic children and be able to give suggestions for parents
3. To understand the principle of the support for children having difficulties in a basic expressive language and the method with technique of language and speech developmental practices

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
5 minutes	The speaker introduces the lesson by randomly asks about the experiences relating the support of a child having expressive language problems	
20 minutes	The speaker gives the lectures on the principle to promote a child having the basic expressive language problems which comprise the perceptive mechanism and the responsive speaking of a listener, speaking mechanism, and the speech and language development both receptive and expressive language, Communication Disorders, factors influencing the speech and language development, Speech production, an evaluation of Delayed Speech children, eye contact, working between eyes and hands, listening and expressing.	Power Point
25 minutes 10 minutes	1. The speaker gives a lecture on the methods and the techniques of the language and speech development which contain the ability before speaking, the beginning stage of the instruction when a child refuses to do any activities, a basic necessity of speech production, focusing on something, evaluation, suggestions for practices, the level advancement in speech production, taking turn when playing, simulation, evaluation of simulation, evaluation of taking turn for a role, suggestions for practices, unintentional plays, imitating activities (sit opposite to a child), songs for expressions or playing, an appropriate play, skill before speech production, specific pronunciation, sound of music, the first meaningful word, repeating words, an appropriate play for teaching verbs, and linking the sentences. 2. Summarize and give the trainee time for inquiry.	Power Point

Handout

Language disability is a crucial problem found for Autistic children, but this problem can be solved when the children are stimulated and instructed with correct methods. Teaching languages for Autistic children contains the following process which can be applied to the language developmental difficulties and other delayed speeches such as Delayed Speech, Intellectual Disabilities and Hearing Loss. With reference to language development and speech, the process can be divided into 7 levels.

I. Level 1. Unintentional communication

Goal: The interpretation of behavior as a communication
Activities employed) Activity 1.1.1-1.1.5)

1.1 Pre - Language Teaching

Activity 1.1.1 A puppy in a wooden frame or a 4 or 6-piece jigsaw

Objective To teach a kid to learn how to play with a toy
Material A puppy in a wooden frame
Method A trainer and a kid sit face to face with a toy on a table. Then, the trainer calls a kid's name to take each puppy toy out of a wooden box. After that, the trainer shows the kid a puppy and says "dog" and gives the kids each dog. Next, teach the kid put a puppy back to a frame until completing all frame. At first, the trainer puts a puppy into each frame as an example because the kids may not know how to do it. In case that the kid cannot do it himself, the trainer can help him by holding his hands while putting a puppy into a box frame. Then, let the kid do it himself.
Note: A hyperactive kid should be placed at the corner of the room and blocked with tables in order to limit the space of running around.

Activity 1.1.2 A plane assembly

Objective To practice a kid to learn with a complicated toy
Material A plane toy)a disassemble and returns(
Method A trainer sits next to a kid with a plane toy on the table. Then, the trainer lets the kid ply with a toy and speaks "a plane's sound: Vroom Vroom.".. "a plane has a propeller." As speaking, the trainer spins a propeller and lets the kid do it himself etc. After letting the kid play with a plane toy, the trainer removes every part of a plane toy and teaches him to assemble them. At first, the kid may need helps such as an example of the assembly, hold the kids' hands as assembling and gradually have him do it himself at last.

Activity 1.1.3 To look

Objective To take a look with purposes
Material colorful toys such as oranges, bananas, grapes, apples, or baskets
Method The trainer and a kid sit face to face which are in the same position and puts a fruit basket is on a table. The trainer shows an orange to a kid at his eye level to watch and says "(the kid's name) look at this orange." If a kid still neglects to see the orange, say "Hist" or gentry turns his face to look at the orange and give it to the kid when he sees it. Give the kid time to play with an orange before keeping in a basket. Next, the trainer does the same thing with the second orange but changes the position to show for the kid such as over the head, next to the trainer's mouth, on the left side or on the right side etc.
Note: This activity can be changed to others such as throwing – receiving a ball (the third person stands behind a kid and helps him to throw or receive a ball until he can do it himself). Otherwise, playing with a winding doll can be used. The trainer winds the doll, lets the doll run and encourages a kid walks to grasp the doll back and so on.

Activity 1.1.4 To listen

Objective To practice listening and searching for the sound origin
Material 2 pieces of toys with sound and 2 hand puppets (or bags)
Method A trainer and a kid sit face to face and an assistant is next to the kid. The trainer carries a doll in each hand in front of the kid. Then, explain that when hearing the sound, the kid can touch the toy from which he can hear the sound. In the beginning, the assistant helps the kid touch the toy with the sound. Repeat doing for 5 times and let the kid try to do it himself. If the kid still cannot do it, the assistant can do more helps such as moving the kid's hand or catching the kid's hand to the toy with the sound again and again until he can do it. Next, put the puppets (or bags) on the assistant's hands in order that the kid cannot see the movement of the assistant's hand when squeezing the toy. Practice doing the same thing above until the kid can listen to the sound and tell where the origin of the sound comes from.

Activity 1.1.5 Categorizing the color groups

Objective To practice observing and categorizing color groups
Material A ball with wooden sticks
Method A trainer and a kid sit face to face and put the wooden sticks on the table. The trainer asks the kid to pick a ball out of the wooden stick. Then, give the kid each ball and teach him to fill in the wooden stick by categorizing color group. In case that the kid does it wrong, say "wrong" and hold his hand to pick that ball out of the wooden stick. Next, put the ball with the right color instead and repeat doing until the kid can do it himself.

1.2 The Instructions of Listening and Understanding Languages

Activities (1.2.1 -1.2.6)

Activity 1.2.1 Following the easy instructions such as clapping hands

Objective To practice listening meaningfully
Material none
Method A trainer and a kid sit face to face and the speaker calls the kid's name and says "clap your hands." When the kid follows the instructions, the trainer should give him a reward immediately. However, if the kid cannot do anything, the trainer needs to clap the hands slowly as an example. Then, let the kid follow. If the kid still does nothing, hold the kid's hands and practice clapping repeatedly. Continue clapping until the kid can do it himself. Gradually reduce the help from holding the kid's hands to touching his wrists, and elbows respectively. When the kid can follow the first instruction, the trainer practices the additional ones such as waving his hands for good bye, kissing or saying hello with the same technique.

Activity 1.2.2 Remembering your names

Objective To have a kid response by looking or facing to the caller when named
Material snack
Method A trainer sits next to a kid and calls his name. If the kid turns his face upward, give him a reward immediately by hugging, giving compliment, or sharing some snack. If the kid has no responses toward the calling, the trainer should move to be at the kid's front and crouch in order that the trainer's face and the kid's are in the same position before calling his name. If there is no response again, turn the kid's face to face the trainer before calling. In the beginning, call his name at the nearby distance and give him a reward every time he can turn face toward the trainer. When the kid responses quite well, the trainer gradually moves to the farther distance and changes to other directions before calling. After practicing calling, the trainer can reduce the amount of rewarding. Practice doing until the kid can remember his name.

Activity 1.2.3 Teaching the family members

Objective To teach a kid know the family members
Material Photos of family members such as father, mother, brother and sister
Method A trainer sits next to the kid and puts the photos of "mother" in front of the kid. Then, the trainer says "mother" as well as holds the kid's finger to point to the photo repeatedly about 5 times. Next, the trainer keeps the photo of mother and replaces with the photo of "father." Practice in the same way. After that, add the photo of "mother" on the table and asks the kid point to "father" or "mother" accordant with the instruction. If the kid cannot point to the correct one, hold his hand and repeatedly point to the correct photos until he can do it. Lastly, add more photos of other people and practice each photo.
Note: Real people can be pointed out instead of the photos.

Activity 1.2.4 Teaching about body parts such as ears

Objective To understand and to point to each body part from the instructions
Material Animal toys such as horses, hens, monkeys and pigs
Method A trainer and a kid sit face to face. Then, the trainer asks the kid "point to the ears" and hold the kid's hand to point to them. Repeat doing by holding his hand in the beginning of practices and gradually reduce the helps; for instance, change the kid's hand to touch his wrist, or elbow respectively. The trainer himself can point to the ear and have the kid imitate the action. Do it again and again until the kid can do it himself and move to other parts of the body such as a mouth, a nose with the same practice. Give the kid the animal dolls when he can follow the instruction.
Note: Acting in front of a mirror can also promote the skill of watching.

Activity 1.2.5 Teaching animals' names

Objective To learn the categorize of animals' names
Material Animal toys such as dogs, cats, hens, and boxes
Method A trainer and a kid sit face to face and the trainer shows the kid an animal's doll and says "a dog." Slowly speak and add more information about a dog doll; for example, "a dog says woof-woof," "a dog sits," "a dog runs" etc. Practice repeatedly until the kid can remember what a dog is. Then, keep the dog toy in a box and show the next animal with the same practice. Next, the trainer puts both animal toys on the table and asks the kid to send the animal to the trainer after hearing its name. Even if the kid sends the wrong one, hold his help for help until he can do it himself. Finally, other animals can be added one at a time.
Note: This activity can be applied to the instruction about other categorize such as things, fruits and so on.

Activity 1.2.6 Taking turn playing

Objective To let a kid learn how to wait and to take turns while playing
Material Dominos
Method A trainer and the kid sit in the opposite side of a table, and an assistant sits next to the kid. Give 10 pieces of dominos to the trainer and the kid. Put one piece of domino in the middle of the table, and ask "Who starts first? Raise the hand." If the kid does not raise his hand up, the assistant can help him. Then, the assistant holds the kid's hand and puts the first domino on the table. The trainer says, "my turn" and pick that piece of domino. Next, the trainer says, "…(the kid's name)… turns" and waits for the kid pick up the domino to arrange with the former. When the kid cannot do anything, the assistant can help him and gradually reduce it such as changing way from holding the kid's hand to touching or acting like picking a piece of domino. Leave the kid learn and do it himself at last.

Note: In case that the kid does not wait for his turn, the assistant says "wait" and hold the kid's arm and fold over the chest. The kid can learn how to wait by crossing his arm which is symbolic as waiting time.

II Level 2 Basic Intentional Communication/ Starting with following an easy instruction

Goal: 1. Focus on the intentional expression through looking at a material or a person

2. Start to understand more abstract words

Activity 2.1.1- 2.1.5

Activity 2.1.1 Body Movement with Various Postures

Objective To learn to control body movement better
Material Pictures of body movement with various postures
Method Show the pictures to a kid and urge him to do so. An assistant may help him by holding his arms and legs. A trainer does the same postures in order to be a model. Start from an easy posture and no balancing-problem postures in order to let kids feel that they can do it. Then, gradually train the harder ones, for example, standing up, sitting down, stretching both arms, raising right arm, raising left arm, bending down, jumping and etc.

Activity 2.1.2 Arm and Hand Movement

Objective To learn to control arm's and hand's movements better
Material none
Method A trainer and a kid sit facing each other. The kid sits on helper's laps. When a trainer calls the kid's names and says "Clap your hands," the assistant holds the kid's hands to assist him clap his hands. When the trainer says "give me five," the assistant assists him to raise his hands to reach and face his palms against the trainer's. The trainer and the assistant repeatedly do the same trainings. Assist the kids less until he can follow the instructions by himself Then, add more complication, such as clapping hands and facing palms against each other one side at one time, switching left-right, or doing the activity faster.
Note: Kids should have been trained to follow easy instructions, for example, clapping their hands, before joining this activity.

Activity 2.1.3 Bead Embroidery: Be careful for a kid taking a toy into his mouth.

Bigger things for an oral cavity are recommended.

Objective To learn to control hand's and finger's movements better
Material different beads with various sizes of holes and ropes for embroidery
Method Firstly, a trainer shows a kid how to embroider, starting with big-hole beads. Next, teach the kid by holding his hand and helping him to embroider at the beginning. Then, gradually reduce assistance until he can do it by himself. After that, let him embroider the smaller ones in order to learn to control hand's and finger's movements better.

Activity 2.1.4 Mouth Movement

Objective To be able to move mouth in different shapes and to get prepared for pronunciation
Material mirrors
Method A trainer and a kid sit facing each other. The trainer shows the kid different shapes of mouth movements and instructs him to follow, for example, closing and opening a mouth as wide as possible, grinning and trying to spread as wide as possible, wrapping a mouth and extending to the front as much as possible. After that, try the exercise "open-wrap-grin," or "grin-wrap-open." In case of having difficulties moving a mouth in different shapes, the

assistant may assist, for example, by using hands to wrap his mouth, by massaging the corners of his mouth if his mouth is tense during the practice, or by sitting beside the trainer in front of a mirror so that the kid can see his own and the trainer's faces at the same time. Repeatedly practice and reduce assistance until he can do it by himself.

Activity 2.1.5 Tongue Movement

Objective To be able to move tongues to different positions and to get prepared for pronunciation

Material mirrors

Method A trainer and a kid sit facing each other. The trainer moves his tongue in different positions and instructs the kid to follow, for example, sticking out tongue as long as possible, sticking out the tongue and reaching the corners of mouth, switching left-right, sticking out the tongue and pushing the cheek pouches, switching left-right, sticking out the tongue and reaching the gum ridge, and sticking out the tongue to the front and pulling tongue back almost touching pharynx. If the kid finds it hard to do the activities, use snacks such as, lollipops or ice-cream for assistance by letting them lick the snacks, or use hands to control kid's tongues to different positions. In case the tongue is tense during the activity, massage his tongue or practice in front of a mirror, so that the kid can see his own and the trainer's faces at the same time. Repeatedly practice and reduce assistance until he can do it by himself. After being able to move the mouth and the tongue well, start practicing pronunciation that doesn't have meaning; accordingly, it will be a good start to practice pronouncing words with meanings in the next stage.

There are 9 activities to provide the basis before a level-3 practice.

Activity 1. Onomatopoeia when playing with a toy

Objective To imitate different sounds of toys

Material toys (e.g.) cars, trains, guns, clocks

Method A trainer and a kid sit facing each other. Put all toys on one side of a table, so that they can see all the toys of which sounds they need to imitate. The trainer picks a toy car. After the kid look at it, place it on the table and make "purr" sound when imitating the sound of a driving car. Make "shrill" sound to imitate the sound of a car horn. Urge the kid to play toys and imitate the sounds. Don't worry if his pronunciation is not correct in the beginning. Repeatedly practice about 5 times. Keep the first toy on the other side of the table before picking up the second one and continue the practice with the same method.

Other samples used to urge kids:

A train	sounds	"choo-choo"	or	"chooga-chooga"
A gun	sounds	"pew-pew"	or	"p-taff"
A clock	sounds	"tick-tock "		

Activity 2. Animal Onomatopoeia

Objective To imitate different sounds of animals leading to speech

Material Pictures or dolls of animal with easy sounds to imitate

Method A trainer and a kid sit facing each other. Put dolls of dogs, cats, cows and frogs on one side of a table. The trainer picks up a frog doll and waits until a kid look at it. If the kid does not look at it, make sound "joo-joo" to call attention. Then, make sound "croak" to imitate the frog's sound and urge kids to follow, or use a song "A frog makes croak-croak sound" to help. If using songs, slowly and repeatedly sing. At the part "A frog makes …," the trainer stops singing and waits for kid the kid to pronounce. If the kid doesn't pronounce, the trainer may adjust his mouth shape to pronounce without making sound. Repeatedly practice about 5

times. Then, keep the first toy on the other side of the table, and pick up the second one and continue the practice with the same method.

Other samples used to urge a kid:

A dog sounds “rrowff”
A cat sounds “meow-meow”
A cow sounds “moo-moo”

Activity 3. “Um” sound

Objective To get prepared to pronounce /m/
Material none
Method A trainer and a kid sit facing each other. A trainer calls a kid’s names, says “Close your mouth,” closes his mouth and instructs the kid to follow. Give the kid a reward or praise him “Good job” when the kid follows the instructions. Then, make a long “Umm” sound and instruct kids to imitate. If the kid can’t do it correctly, repeat about 5 times. However, if the kid still can’t do it correctly, let the kid learn by touching. A trainer and kids sit closer facing each other with no tables between them. Then, a trainer uses his forefinger to touch kid’s nose and the kid use his forefinger to touch the trainer’s nose when making “Umm” sound. Accordingly, the kid will that there’s a vibration at nose when pronouncing this sound. Then, instruct the kid to follow.)Picture(1

Activity 4 Mouth Sucking Sound

Objective To get prepared to pronounce /p/
Material none
Method A trainer calls a kid’s name, says “close your mouth tight,” closes his mouth and urges the kid to follow. Give the kid a reward or praise them when he can do it correctly. The trainer may use his hand to close his mouth tighter. (This will emphasize the kid to close their mouth tighter.) After that, the trainer makes mouth sucking sound loudly and pronounces “Po,” and urges him to follow. Repeatedly do the training until he can do it by himself.

Activity 5. “Wa-Wa” sound

Objective To get prepared to pronounce /w/
Material pencils or pens with 1-cm diameter
Method A trainer and a kid sit facing each other. The trainer calls a kid’s name, says “make a round mouth shape,” makes his mouth shape round and urges the kid to follow. Then, practice by switching wrapping and opening the mouth widely. After practicing about 5 times, try move out the object from his mouth and see if they can do it by themselves.

Activity 6. Blasting

Objective To get prepared to pronounce /p/
Material paper with ½-inch width and 3-inch length, and mirrors
Method A trainer and a kid sit facing each other. A trainer calls kid’s names, says “Close your mouth and blast,” makes “Pi” sound as a sample, and urges the kid to follow. If the kid can’t do it, let him use his back hand to stay close to the trainer’s mouth when making “Pi” sound. This will help him know that a blasting occurs while making this sound.) Picture 2 (Cutting paper into a ½-inch width and a 3-inch length and hold it in front of the trainer’s mouth in order to show a blasting for help. Then, practice and hold the paper in front of his mouth, so that he can see a blasting.)Picture 3 (Repeatedly practice until he can do it by himself.
Note: This activity is considerably hard. It is incorrect that most kids often keep their airflow in their cheeks and blast. A trainer should demonstrate the correct method by keeping airflow at lips and slowly blasting out from upper-lower lips. Repeatedly practice until they can do it by themselves, or use a mirror so as to see their face.

Activity 7. Throat or Expectorate Sound

Objective To get prepared to pronounce /k/
Material mirrors, and wooden tongue depressors
Method A trainer and a kid sit facing each other. The trainer instructs the kid to imitate the following method: Open the mouth wide and pull the tongue back almost touching the pharynx. Make /k/ sound by blasting from the throat (Or make expectorate sound). The trainer slowly and repeatedly demonstrates, so that the kid can clearly see and follow. In case the kid can't pull his tongue back, use a mirror to help or use a wooden tongue depressor to push his tongue. If the kid can't make /k/ or expectorate sound, let him place his hand on the trainer's mouth. According, he will know that there is an airflow there.

Activities 8-9 are the practices of vowel pronunciation

Activity 8 Single vowel pronunciation

Objective To be able to pronounce single vowel (e.g.) /a:/ /i:/ /u:/
Material mirrors
Method The same as Activity 25, practice the mouth movement in different postures, for example, opening the mouth, grinning, and wrapping the mouth. If the kid can do all mouth movements, start pronunciation practice. The trainer demonstrates the following samples:
Open the mouth wide and make a long "/a:/" sound
Grin and make a long "/i:/" sound
Wrap the mouth and make a long /"u:/" sound
In case the kid can't pronounce correctly, the trainer may let him touch, for example, touching the trainer's larynx when making "/a:/" sounds. This will help the kid know that there's a vibration. Using a mirror can help him see his own and the trainer's mouth movement.

Activity 9 Diphthong Pronunciation

Objective To be able to pronounce diphthong
Material mirrors
Method This is the practice which continues from Activity 24. After the kid can pronounce single vowels, teach him to pronounce the diphthong.
/ao/ is made up with "a" and "o."
/ua/ is made up with "u" and "a."
/ia/ is made up with "i" and "a."
/iua/ is made up with "i," "a" and "u."
In case the kid can't pronounce them correctly, for instance, mispronouncing "ao" to "a," helpers many assist by letting the kid make a long "a" sound and using the assistant's hands to wrap the kid's mouth. Mispronouncing "ua" to "u," the assistant can assist by letting the kid make a long "u" sound and using the assistant's hands to stretch out. Repeatedly practice and reduce assistance until he can do it by himself. Then, start practicing pronouncing words with meanings, for example, from "a" to "pa," from "u" to "pu." When the kid can pronounce more, combine those words and instruct him to pronounce phrases and sentences consecutively until he can respond to daily conversations.

III Level 3 Single words

Goal: 1. Understanding name of the object and basic categorizing

2. Understanding verbs

3. Using single words with postures and communications

This level consists of 5 activities.

Activity 1 Expressing requirement "ao" (take it in English)

Objective To be able to express one's own requirement
Material toys (e.g.) toy wooden loops, favorite toys
Method A trainer and a kid sit facing each other. Put toys on the table. The trainer instructs the kid to pick out one by one from a stake. (If the kid can't do it, the trainer holds the kid's hand to assist.) When all loops have been picked out, the trainer picks one by one, asks the kids "Ao-mai?" immediately answers "ao" to let the kid imitate the word "ao." Repeatedly do the same until he can imitate the word "ao" correctly every time. After that, the trainer asks "Ao-mai?" and waits the kid to answer by himself. If the kid still does not answer, the trainer makes his mouth shape saying "ao" without making sound and waits for the kid to say it by himself. The kid still can't pronounce it by himself, repeatedly practice from the first stage until he can do it by himself.

Activity 2 Expressing requirement "Koh"

Objective To able to express one's own requirement
Material snacks, and baskets
Method A trainer holds a snack basket and asks the kid "Do you want some snacks?" Instruct the kid to reply "ao.") Activity 26 (When the kid replies "ao," the trainer teaches him to say "Koh" by holding and opening the kid's hands, and pulling to the trainer. The trainer says "Koh" slowly and emphasizes to urge the kid to follow. Immediately give him a reward after he has tried. If the kid still can't pronounce the word "Koh" in the beginning, let him make expectorate sound (Activity 23.) He will have to respond first before rewarded. Repeatedly practice until he can do it by himself.

Activity 3 Pronouncing /m/ sound

Objective To be able to pronounce a word with /m/ sound
Material toys beginning with /m/ sound in Thai language (e.g.) dogs, cats, pigs, bears
Method After the kid can do **Activity 19 "Um" sound**, start practicing making /m/ sound. A trainer holds a dog doll close to the trainer's mouth and slowly makes "Um… mah" sound. Emphasize the sound, so that the kid can see the mouth movement while pronouncing. Repeatedly do the same 5 times. Then, change to other dolls and repeatedly practice until he can do it by himself After that, add more words such as, "mam-mam," "mae," "mee," "mai," "ma," and etc.

Activity 4 Pronouncing /p/ sound

Objective To be able to pronounce a word with /m/ sound
Material toys beginning with /m/ sound in Thai language (e.g.) fish, crabs, ducks
Method After the kid can do **Activity 20 Mouth Sucking Sound,** start practicing making /p/ sound. The trainer makes a mouth sucking voice and urges the kid to follow. Hold a fish doll close to the trainer's mouth and slowly make "Pla" sound. Emphasize the sound, and repeat 5 times. Pause. If the kid still can't do it by himself, demonstrate again. Then, change to other dolls and repeatedly practice until he can do it by himself. After that, add more words such as, "pao," "pai," "pa," "pid," "peud," and etc.

Note: A kid may not pronounce clearly in the beginning, for example, mispronouncing "pla" to "pa." First, let him pronounce and fix the clearness problem later. If the kid can't still make sound, practice from the first stage repeatedly until he can do it by himself.

Activity 5 Answering questions "what"

Objective To be able to answer questions "what"
Material Animal dolls (e.g.) dogs, elephants, ducks, fish
Method After **Activity 10 Animal Onomatopoeia**, a trainer may put 4 dolls and instructs the kid to pick up each one for a trainer, for instance, "give me the elephant." If the kid picks up as the trainer's instruction correctly, start the activity. The trainer picks up a dog doll and says "a dog." Let the kid play with the doll and give him instructions, by emphasizing the word "dog," for example, "a dog runs," "a dog jumps," and etc. Then, the trainer asks "What is this?" and waits the kid to answer. If the kid can't answer, the trainer answers "a dog" and asks the kid again. If the kid still can't answer, the trainer makes his mouth shape to say the word without making sounds, or makes "Um…" sound. Repeatedly practice until he can answer the question by himself. After that, instruct the kid to answer other word categories for example, object, food etc.
Note: The question "what" in this activity can be changed to "who" by using the same method. Change materials to family members or personal photos.

IV Level 4 Word Combination

Goal: 1. Understanding verbs/main idea words

2. Using word combination to explain situations

3. Using word combination about situations and surroundings

Samples of Words Combination Activity:

Activity 1 Pronouncing 2 words

Objective To be able to say 2 words
Material One of kid's favorite and unwanted toys
Method A trainer and a kid sit facing each other. Choose the words that the kid has already pronounced to combine, for instance, the kid already know how to say "ao," "mai," "pla," and "krub." Then, combine these words, for example, "ao-krub," "mai-ao," and "ao-pla." The trainer shows "car and fish" and lets the kid choose one. Then, ask him "(kid's name) which one do you want?" When the kid chooses one, for example, choosing "car," give it to the kid and instruct him to say "ao-rod." The other one that the kid don't choose, instruct the kid to say "mai-ao." First, let him say each single word. Then, instruct him to say 2-combined words, for instance, saying each single word "ao" and "rod" to "ao-rod." Also for "mai" and "ao," say "mai-ao." Repeatedly practice until he can do it by himself.
Note: This activity can be applied in teaching other pronouncing 2-word practice.

Activity 2 Mee – Mai-mee (Have or None)

Objective to understand and be able to say the words "mee" and "mai-mee"
Material two bottles and snacks
Method A trainer sits beside a kid. Place 2 bottles on the table. A trainer opens both bottles' lids, shows the bottles inside, says "mai-mee," turns the bottles upside down, and shakes bottles. Then, let the kid put snacks into one bottle and close both bottles. Switch bottles lest the kid should remember which one has snacks. Put both bottles on the table and let the kid pick each the bottle and open them. If it has snacks inside, the trainer says "mee," instruct the kid to follow and give him snacks as a reward. If there's no snack inside, the trainer says "mai-

mee," instructs kid to follow and to say "Kho," which is the way the kid can use to have snacks. A trainer says "Koh" and holds the kid's hand, and instructs the kid to follow. If the kid does so, give him snacks. Repeatedly practice until he can do it by himself.

V Level 5 Early Syntax

Goal saying sentences consisting of subjects, verbs, and objects saying sentences with various grammars, using words who, what, where, how understanding past and present sentences

Samples of the phrase and sentence level

Activity 1. Speech in phrase and sentence level

Objective To be able to speak phrase and sentence
Material books, or pictures of different daily-routine events (e.g.) taking shower, washing hair, brushing teeth, washing hands, etc.
Method A trainer sits beside a kid. Place books or pictures on a table one by one. The trainer explains pictures to the kid, for instance, a picture of "Noo-poem," the trainer points at it and says "Noo-Pom." Then, ask a question "who?" to urge kids to answer . If the kid can't answer, the trainer answers instead. Repeatedly ask the question "who?" until the kid can answer. Then, place the first picture and show the second one, and says "Noo-Pom is brushing her teeth." Ask a question "What is Noo-Pom doing?" Wait until the kid answers. If the kid can't answer, the trainer answers instead. Repeatedly ask until he can speak by himself. After that, practice other sentences using the same method.
Note: The kid should be able to speak 2-3 linking words and 20-30 statements in different situations.

Activity 2. Expressing requirement by using phrases and sentences

Objective to be able to express requirement by using phrases and sentences
Material toys) e.g.) pots, refrigerators, dishes, spoons, tables, chairs, dolls, etc.
Method A trainer picks up toys one by one and asks a kid "What's this?" Let the kid answer each name of the toys such as, tables, chairs, dishes, etc. Then, let the kid play with their toys for a while. After that, keep all toys in a bag. Instruct the kids to express requirement. A trainer asks "(name of the kid,) what do you want?" Pause asking to wait the kid to answer. If the kid can't answer, the trainer picks up a toy such as a table, to show the kid and says "Carry a table" Wait for the kid to imitate and give the kid the toy. The trainer asks the kid "what do you want?" and tries to urge them to say their requirement, and reduce assistance. Repeatedly practice until he can express his own requirements by himself.

Activity 3 What sound is that?

Objective To link sounds and objects
Material often seen animal dolls (e.g.) dogs, cats, ducks, frogs
Method A trainer and a kid sit facing each other. A trainer picks a dog doll, shows to the kid and says "a dog," "a dog makes rrowff sound." Place a dog doll on a table. Next, pick up a cat doll, show to the kid and say "a cat," "a cat makes meow-meow sound." Place a cat doll on the table. Then, the trainer imitates a dog's or a cat's sound and instructs the kid to point to the animal that he hear the sound. If the kid can't do it, the trainer holds the kid's hand to point out instead. Repeatedly practice until he can do it by himself. Then, change from pointing to speaking. Moreover, let the kid imitate the animal's sound and gradually add more kinds of animal. After the kid can do it, practice linking animal with its habitat, animal with its food, and telling object's purpose.

Activity 4 What's in the bag?

Objective To practice using sense and imaging what is in the bag.
Material Fruits with different shape) e.g.) bananas, grapes, oranges and, bags
Method A trainer sits beside a kid. A trainer picks up each fruit, asks the kid "What's this," and waits for the kid to answer. Then, let the kid pick up 2 kinds of fruit and put them into a bag. Close the bag tight for fear that kids should put his hand inside. Let kids draw out one by one. The trainer asks a question and waits for the kid to answer. If the kid can't answer, let the kid pick it up and answer. Put the fruits in the bag. Repeatedly practice until he can answer by himself without drawing out. After that, add more kinds of fruits and let the kid answer.

Activity 5 Role Playing

Objective To practice learning from hypothetical situations
Material Refrigerators, and objects inside (e.g.) eggs, orange juice, milk, ice, apples and etc.
Method Make a role play of different situations while playing with refrigerators and things inside. The trainer gives instructions, for instance, "open" while opening the refrigerator, and asks "What's this?" while picking out things from the refrigerator. If the kid can't answer, a trainer answers instead and asks again and again, or instructs him to pick out anything. Trying other activities; for example, put ice in the glass and let the kid do it as well.

VI Level 6 (Syntax Mastery)

Goal: 1. Urging to use simple and complex sentences

2. Urging to use grammatically correct sentences

3. Urging abstract understanding about words

Activity 1 Story Telling
Objective To be able to narrate situations progressively
Material Pictures of 4 progressive situations
Method A trainer sits beside a kid. Put the picture of the first situation on a table. The trainer describes the situation of the first picture. Then put the second, third, fourth ones, on the table consecutively, and describe situations of the pictures. After finishing the story, keep all pictures. Start placing the first picture on the table and urge the kid to narrate by themselves. In the beginning, the trainer may help him, for example, by saying the whole sentence and letting the kid follow. Repeatedly practice and reduce assistance, for instance, helping start the sentence only and pausing to let the kid say the rest of the sentence. Repeatedly practice until he can narrate a story from pictures. Urge the kid to use the connectors, such as "which, that, and, must, then, because of etc."
Note: In the beginning, practice to narrate a story from only one picture. Gradually add one by one more pictures. After the kid is able to tell a story by themselves, teach him to arrange pictures of situations in order they should be.

VII Level 7 (Grammatically correct speech/ telling a story)

Goal – developing an understanding about alphabets developing an understanding about meanings of words in different forms (e.g.) homophones, homographs, metaphors developing reading and writing skills

Activity Practicing telling a story using "Riang-toi-roi-kwam"

From all these sample activities, a trainer may design his own activity in order to provide language development, by using sample activity of teaching speech-language for autistic child and the delayed speech. These activities can be used as a way to teach speech-language to the kid, by starting from easy activities. Gradually add more complications and difficulties consecutively. Materials and methods can be changed according to trainer's and kid's situations properly.

Lesson VI: Introduction to Augmentative and Alternative Communication, AAC, for Children with Complex Communication Needs

Department: AAC Clinic / Autism Research Center

Learner Objectives

Trainees will be able to

1. List the various functions of communication
2. Define AAC, give examples of different tools
3. Identify who can benefit from AAC
4. Explain the difference between core vocabulary and extended vocabulary
5. Apply the concept of language immersion to children requiring the use of alternate forms of communication, aided language input

Lesson Content: Augmentative and Alternative Communication, AAC, for Children with Complex Communication Needs 180 minutes

Course 6: Introduction to Augmentative and Alternative Communication, AAC, for Children with Complex Communication Needs

Concept

Effective communication occurs when the intent and meaning of one individual is understood by another person. People communicate in a variety of modes for a broad range of functions. Children who do not have speech or whose speech is not meeting their communication needs need to be considered as candidates for AAC intervention.

Communication is the exchange of information and meaning between two or more people. Within the context of the International Classification of Functioning and Disability — ICF (World Health Organization 2001), "complex communication needs" relates to people who have a severe limitation in communication functioning, related to their health condition, body structures and functions, activities and participation, environmental factors and personal factors. Any child whose speech and language skills are not developing normally or who has a condition making normal speech development unlikely ought to be considered for augmentative/alternative communication intervention. Augmentative and Alternative Communication, AAC, is described by ISAAC, International Society for Augmentative and Alternative Communication, as a set of tools and strategies that an individual uses to solve everyday communication challenges. AAC includes the use of text, gestures, facial expressions, touch, eye contact, sign language, symbols, pictures, speech generating devices, tablet applications and others. Research has shown the benefits of AAC interventions in a range of areas including an increase in functional communication skills, reduction of challenging behaviors, positive effects on language development both receptive and expressive as well as speech production for children with CCN (Drager, Light & McNaughton, 2010).

Aided language input, ALI, is essential to the success of learning to speak with AAC. In ALI a communication partner teaches symbol meaning and models language by combining his or her own verbal input with a selection of vocabulary on the user's AAC system or topic boards or other communication displays. This is done by simultaneously selecting vocabulary on the AAC system and speaking. Similar to learning and using a foreign language AAC users require immersion. We cannot simply give the child the tool without training on how to use it.

Learning Objectives

Trainees will be able to

1. List the various functions of communication
2. Define AAC, give examples of different tools
3. Identify who can benefit from AAC
4. Explain the difference between core vocabulary and extended vocabulary
5. Apply the concept of language immersion to children requiring the use of alternate forms of communication, aided language input

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/Materials
30 min	Review: Communication Functions Define: Complex Communication Needs Augmentative & Alternative Communication Myths of AAC	- Power Point – Multimodal Communication for Children with Complex Communication Needs
30 min	Discuss Vocabulary Selection (core and extended vocabulary) Select 20 words activity – Participants will be given a blank grid and be asked to fill in with the words they would want to use if they could not speak. They will be asked to communicate in given with the grids they filled out. Participants will they be given Core vocabulary displays and compare their ability to communicate during the same scenarios. Differentiate Visual supports from Robust Communication systems	-Vocabulary handouts -Powerpoint examples
45 min	Hands on exploration of materials / devices Assessment & Feature matching – S.E.T.T. process	- AAC Tools, light - high tech
60 min	Define Aided Language Input Implementation: -Divide into pairs and complete Activity First worksheets using core vocabulary display with a commonly occurring activity. -Practice providing Aided Language Input during the activity taking turns being the Communication Partner and the individual with Complex Communication Needs Reflect on activity	-Videos -Activity First handout Activity toys/props 1. Bubbles 2. Cars and tunnels 3. Puzzles 4. Storybooks 5. Tea Party 6. Board Game
15 min	Summarize and allow time for questions	

Lesson VII: Applied Eastern Psychology for Children with ADHD
Department: Eastern Psychosocial Treatment Center
Learner Objectives

Trainees will be able to

1. Identify the attention problems
2. Apply the concept of Yin/Yang and Raja Yoga for children with ADHD

Lesson Content

Eastern Psychology for Children with ADHD 120 minutes

Course 7: Applied Eastern Psychology for Children with ADHD

Concept

Eastern psychology is a psychological system in the core belief of Eastern culture/philosophy, include Yoga, Tao, Zen and can be an effective activity for improving Children with ADHD.

Learning Objectives

Trainees will be able to

1. Understanding the concept of Eastern Psychology
2. Identify the attention problems
3. Apply the concept of Yin-Yang and Raja Yoga to improving children with ADHD

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
30 min	The speaker lectures on “Eastern Psychology”	Powerpoint
30 min	1. The speaker lectures on “Attention” 2. Practicum on identify the attention problems	Powerpoint
50 min	1. The speaker lectures on “How to applied Eastern Psychology for Children with ADHD” 2. Practicum on Attention Training Program	Powerpoint
10 min	Q&A and conclusion	

Lesson VIII: Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model

Department:

1. Vincent Chin-Hung Chen
   Professor of Chang Gung University and Chiayi Chang Gung Hospital
   Director of the Taiwan Society of Family-Youth Care Association
2. Duujian Tsai
   Pingtung Christian Hospital Chair Professor
   Director of the Center for Bioethics and Social Medicine
   Healthy Asia Co., Ltd. President

Learner Objectives

Trainees will be able to understanding and be aware of the power of caregivers, with the role of professional healer.

Lesson Content

Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model	300 minutes

Course 8: Building Supporting Networks for Children, Using the Taiwan ADHD Patient and Family Supporting Group as Examples

Concept

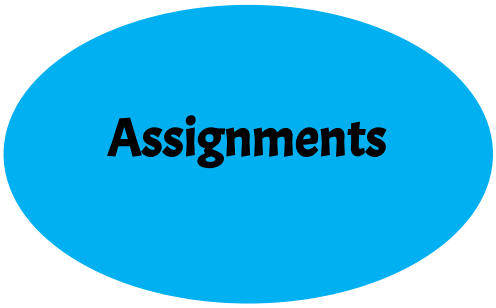
Medical professionalism has been defined as the physician's obligation to primacy of patients' welfare, to enhance patients' autonomy, and to address their quality of life as social justice. The dignity of patients and their families are therefore essential in such professional pursuits. However, while failure to effectively address suffering from patients and their families in clinical settings, the virtue of modern medical professionalism will be immanently eroded. It is the case in point while medical doctors deal with children with Attention deficit hyperactivity disorder (ADHD). In the past ten years, we have witnessed a kind of experience that surpassed the original medical profession and even enriched our professional ability. We also saw the power of caregivers, with the role of professional healer and the dual-theme action experience of ADHD caregivers. Love and willing and their learning are transformed into taking care of their children, taking care of themselves, and even taking care of other families in the same situation. This establishes a cycle of capable goodness based on goodwill and breaks the vicious circle of a negative environment from the negative consequence of ADHD symptoms. Beyond the ADHD symptoms, we wish to touch the hearts of all stakeholders with the 'Shared-Action Model' and propose 'Professionalism 2.0' for the era to come, as ensuring dignity especially for people in societies with significant demands for long-term care.

Learning Objectives

Trainees will be able to understanding and be aware of the power of caregivers, with the role of professional healer.

Learning Activities

Allotted Time	Teaching/Learning Strategies/ Procedures:	Resources/ Materials
280 min	The speaker share the "Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model"	1. Powerpoint 2. DVD
20 min	Q&A and conclusion	


Assignments

Assignments

1. Group Experience Summary Report

The goal of an experience report is for reflection, analysis, inspection or evaluation. The scope of the experience report focus on the subject of the experience can be achieved easily, both by the speakers and the trainees. Being specific will enhance the learning experience.

1.1 Please describe learning experiences:

a. Knowledge acquired: Briefly describe the knowledge you gained through your training experience and relate this knowledge to what you learned in specific courses at tRICD.

b. Skills learned: Describe the skills and any career-specific abilities that you gained during you be a trainee at RICD.

c. Observed attitudes and gained values: Describe the manners, mindsets or values that you found and you perceive as important, in your training program, for a successful job

d. The most challenging task performed: Describe the best and the most challenging mission that was assigned to you during you be a trainee at RICD, how you performed it, and how you overcame challenges while performing it

1.2 Please describe the answer in this questions.

1. What did I learn?
2. Why does it matter?
3. Did any academic concepts become apparent during this experience?
4. Did this experience differ from your initial expectations? Why or why not?
5. How does your experience and academic knowledge inform your understanding of the holistic approach to improving children with developmental delay?
6. What was the goal you were trying to accomplish?
7. Were you able to effectively achieve your goal? Why or why not?
8. Which skills did you bring to the experience that helped you meet your goal?
9. Did you acquire any new skills by having to work to achieve this goal?
10. Was this an easy or a difficult task to undertake? Why?
11. Were any academic concepts utilized to reach the goal you were trying to accomplish? How so?
12. What do the differences between your textbook and your experience in the training program?
13. What might/should be done in the future?
14. How did your skills contribute to the diversity of the people with whom you worked?
15. What personal knowledge and skills did you discover or acquire during this experience that will assist you in your future endeavors in this area?
16. Did this experience inspire you to continue a commitment to work with children with developmental delay?
17. What steps have you taken - or do you plan to take - to implement this plan of continued commitment?

1.3 Please describe Strength, Weakness, Opportunities, Threats (SWOT) of the training program

2. Project Proposal

To complete this section, please see instructions for the preparation of the project:

a. Project title:
b. Name of implementing organization(s):
c. Project location:
d. Project duration:
e. Background of the project: this section should provide a brief introduction to the current situation related to the geographic region and beneficiaries of the project. The background should also describe the problem or critical issue which the proposal seeks to resolve and the relevant experience and capabilities of the project and level of resources that the implementing will provide for project planning, implementation management and follow up.
f. Objectives of the project: this section should describe what the project is expected to achieve in terms of effects among intended beneficiaries. Specifically, the section discusses what changes are expected to occur among intended beneficiaries if project operations are successful. Changes can include new and improved technical skills and knowledge, increased income-generating capacities, and greater public awareness at the community, national, regional or international levels.
g. Expected results of the project: this section should describe the overall results that the project is expected to accomplish and whether there may be unintended effects of the project, and how these possible challenges will be addressed.
h. Project implementation and management: this section should describe how each project objective will be carried out in terms of planned activities, their timing and duration, and who will be responsible for each activity. This can be summarized in a simple table. This section should describe:
    1) Who will be responsible for planning and management of project operations as well as the roles of other bodies and organizations associated with the project?
    2) What arrangements will be established to ensure that there will be effective coordination with other relevant program and activities?

    This section should also discuss proposed mechanisms and procedures for monitoring of project operations to ensure that activities occur as planned, that they remain directed towards stated objectives, and that appropriate corrective action is taken if required.
i. Budget

3. Group Presentation

The presentation is about experience summary report, project proposal, putting it on some slides and then telling what it is you found and your project.

Evaluation Form

An Individual Evaluation Form

The questionnaire relating to the matter of quality examine regarding the content validity of the training program.

Instruction: Consider the definition of the training program if it has propriety. If not, please specify suggestions.

Please examine the training program whether it is consistent with the know-how definition? Tick ✓in the blank.

+1 When you agree that the questions are consistent with what it needs measuring.

0 When you are not sure that the questions are consistent with what it needs measuring.

-1 When you are sure that the questions are consistent with what it needs measuring.

Utility means the training program, where the program can be used to develop knowledge and skills of the trainees.				
Aspect of Utility of the Program	**-1**	**0**	**+1**	**Suggestions**
1. The program is beneficial for improving knowledge and skills for enabling the trainees to improving children with developmental delay				
2. The program is beneficial for improving children with developmental delay.				
3. The program responds to the training need of the trainees and is beneficial for the trainees to improving children with developmental delay.				
4. The program can apply to the development of the trainees to improving children with developmental delay				
Feasibility means the program can be used in the centers specializing in children with developmental delay. The process of the application is practical. It is worth the time when comparing to the duration of the implementation and the additional resource allocation.				
Aspect of Feasibility of the Program	**-1**	**0**	**+1**	**Suggestions**
1. The program can be practical in the centers specializing in children with developmental delay.				
2. The program is easy to understand, easy and not too complicated to use/apply.				
3. The use of the program helps the trainees to gain knowledge, skills and apply to children with developmental delay effectively.				
4. It is feasible for participants to cooperate in the training operation.				
5. Results of the program use are worth when comparing to duration of the operation.				
6. The program is feasible in additional resource allocation.				

Propriety means the program can be used in propriety to the context of the centers specializing in children with developmental delay. The propriety of the program is in the respect of stages, implementation, duration and evaluation.				
Aspect of Propriety of the Program	**-1**	**0**	**+1**	**Suggestions**
1. The program is proper for the context of the centers specializing in children with developmental delay.				
2. The program has propriety in developing children with developmental delay.				
3. The program has propriety for development of the trainees.				
4. Duration of the operation in the program has propriety.				
5. An evaluation of the program has propriety.				
Accuracy means the program is accurate and clear in the specifying of the objectives and contents, the implementation and the reasonable evaluation of the program.				
Aspect of Accuracy of the Program	**-1**	**0**	**+1**	**Suggestions**
1. Concepts and principles in each contents are clear and accurate.				
2. The objectives is clear and accurate.				
3. The contents is accurate for developing knowledge and skills for the trainees.				
4. Methods of the operation is systematic and accurate.				
5. The evaluation of the program is accurate, systematic and reliable.				
6. The content of improving knowledge and skills of the trainees are accurate.				
7. Stages of the operation can improve knowledge and skills of the trainees.				
8. Evaluation of the program shows that the trainees gain knowledge and skills to improving children with developmental delay.				

Training Schedule

Training Schedule
"Holistic Approach to Improving Children with Developmental Delay"
7th – 31st May 2019 (Official holiday 9, 13, 20 May 2019)

Week	Day	Date	Times	Topics	Duration (minutes)	Training Venue
1	1	7 May	09.00-11.30	**Pre-examination Training** Ms.Saowalak Langgapin	150	The 2nd floor meeting room in main building
			11.30-12.00	**Course Orientation** Ms.Saowalak Langgapin	30	The 2nd floor meeting room, main building
			13.00-13.30	**Opening Training Ceremony** Chairperson: Dr.Samai Sirithongthaworn Deputy Director-General of Department of Mental Health		Autistic Research Center meeting room, Piano building
Module I Surveillance, Screening, Evaluation, Diagnosis, and Early Intervention						
			13.30-16.30	**Thai Child Developmental System Model** Dr.Samai Sirithongthaworn Deputy Director-General of Department of Mental Health	180	Autistic Research Center meeting room, Piano building
1	2	8 May	09.00-11.00	**Introduction to RICD & Field Visit around RICD** Ms.Preechaya Phrommin & Ms.Pakpimintra Waratchayathon	120	The 2nd floor meeting room, main building
			11.00-12.00	**Guide to Living in Chiang Mai** Mr.Takkin Teriyapirom	60	The 2nd floor meeting room, main building
			13.00-16.00	**Children with Developmental Delay and Neurodevelopmental Disorders** Dr.Doungkamol Tangwiriyapaiboon Medical Staff Organization	180	Autistic Research Center meeting room, Piano building
	3	10 May	09.00-16.00	**Developmental Surveillance and Promotion Manual: DSPM** Ms.Amara Thanasupaputana Ms.Atchara Choomputhan Nursing Department	360	The 3rd floor meeting room, main building
	4	14 May	09.00-16.00	**Developmental Assessment for Intervention Manual: DAIM** Ms.Suphakphimon Papang Ms.Chayanit Anantaworawong Nursing Department	360	The 3rd floor meeting room, main building

Week	Day	Date	Times	Topics	Duration (minutes)	Training Venue
2	5-6	15-16 May	09.00-16.00	**Thai Early Developmental Assessment for Intervention: TEDA4I** Ms.Chulaphorn Somchai Ms.Wisalinee Veyrudit Ms.Noppawan Bautong Nursing Department	720	The 3rd floor meeting room, main building
Module II Treatments						
Week	**Day**	**Date**	**Times**	**Topics**	**Duration (minutes)**	**Training Venue**
2	7	17 May	09.00-12.00	**Pediatric Physical Therapy in Children with Motor Development Problems** Ms.Ngamphan Chitmin Department of Physical Therapy	180	The 2nd floor meeting room, main building
			13.00-16.00	**Early Stage Development and Postural Support Device Uses** Mr.Joey Tell RICD Wheelchair Project	180	The 4th floor small meeting room, Piano building
	8	21 May	09.00-12.00	**Thai Massage Therapy for Children with Cerebral Palsy and Autism Spectrum Disorder** Ms.Preechaya Phrommin Ms.Chadaporn Sornjai Department of Thai Traditional Medicine	180	The 2nd floor meeting room, main building
			13.00-16.00	**Sensory Integration and Snoezelen** Mr.Krugchai Pichai Ms.Jiraporn Thungtanaopakun Department of Occupational Therapy	180	The 2nd floor meeting room, main building
3	9	22 May	09.00-11.00	**Applied Eastern Psychology for Children with ADHD** Ms.Saowalak Langgapin Eastern Psychosocial Treatment Center	120	The 2nd floor meeting room, main building
			11.00-12.00	**Applied Speech Therapy for Children with Autism** Ms.Pornpiriya Apirajeeranan Department of Speech Therapy	60	The 2nd floor meeting room, main building
			13.00-16.00	**Augmentative and Alternative Communication, for AAC, Children with Complex Communication Needs** Ms.Nicole Marie Bender AAC Clinic	180	Autistic Research Center meeting room, Piano building

Week	Day	Date	Times	Topics	Duration (minutes)	Training Venue
3	10	23 May	09.00-15.00	**Ensuring Dignities for Families of Children with ADHD: Taiwan ADHD Shared-Action Model** Prof.Dr.Duujian Tsai Pingtung Christian Hospital, Chair Professor Director of the Center for Bioethics and Social Medicine Healthy Asia Co., Ltd. President	300	The 2nd floor meeting room, main building
Module III Field-based Observation *(choose only one from your interests below)*						
Elective course for medical resident/physician (1800 hours)						
3-4	12-16	24, 27-30 May	09.00-16.00	A. Medical Staff Organization, Rajanagarindra Institute of Child Development	1800	OPD
		24, 27-30 May	09.00-16.00	B. Medical Staff Organization, Rajanukul Institute, Bangkok **Remark**: *pays* to book your flights, *accommodation*, and activities yourself	1800	OPD
		24, 27 May	09.00-16.00	C1. Field visit	720	1. Chiang Mai Special Education Center 2. Healing Family Foundation 3. Kawila Anukul School 4. Heaw Kean Temple 5. Dulabhathorn Foundation
		28-30 May	09.00-16.00	C2. Medical Staff Organization, Rajanagarindra Institute 0f Child Development	1080	OPD

Week	Day	Date	Times	Topics	Duration (minutes)	Training Venue
Elective course for medical multidisciplinary team (1800 hours)						
3-4	12-16	24, 27-30 May	09.00-16.00	A. Medical multidisciplinary team, Rajanukul Institute, Bangkok **Remark**: *pays* to book your flights, *accommodation*, and activities yourself	1800	Medical multidisciplinary team
		24,27 May	09.00-16.00	B1. Field visit	720	1. Chiang Mai Special Education Center 2. Healing Family Foundation 3. Kawila Anukul School 4. Heaw Kean Temple 5. Dulabhathorn Foundation
		28May	09.00-12.00	B3. Observe and train the language and speech developmental practices for autistic children Ms.Pornpiriya Apirajeeranan Department of Speech Therapy	180	Department of Speech Therapy
			13.00-16.00	B4. AT/AAC Lab: Tool Development - for individuals wanting 'hands on' time to create materials ex. DIY adaptive switch, communication boards Ms.Nicole Marie Bender AAC Clinic	180	AAC Clinic
		29 May	09.00-12.00	B3. Observe and train the language and speech developmental practices for autistic children (cont.) Ms.Pornpiriya Apirajeeranan Department of Speech Therapy	180	Department of Speech Therapy
			13.00-16.00	B5. Snozelen Mr.Krugchai Pichai Department of Occupational Therapy	180	Department of Occupational Therapy
		30 May	09.00-16.00	Elective topics	360	TBA

Week	Day	Date	Times	Topics	Duration (minutes)	Training Venue
4	17	31 May	09.00-12.00	**Presentation**	180	The 2nd floor meeting room, main building
			13.00-15.30	Post-examination training	150	The 2nd floor meeting room, main building
			15.30-16.00	Discussion & feedback	30	The 2nd floor meeting room, main building
			18.00-21.00	Certificate Distribution Ceremony		TBA