#### **Intelligent Education Group**





The Vestibular System





Listening Skills 理解 Understanding 反應 Reaction



眼球追踪能力 **Eye-Tracking Capability** 閱讀 Reading 抄寫 Writing

讓孩子輕松學習的關鍵在于-視覺的靈活性 & 聽覺的靈敏度 The Key to Successful Learning -Keen Sense of Vision & Good Hearing



## 爲何孩子在學習時無法專心? Why Can't Children Concentrate on Learning?

脊椎支配了左右腦的均衡發展 專注能力主要考量于視覺焦距的成熟與 否。想要改善孩子的專注能力? 首先,必 須穩定他們的視覺焦點。借助感統活動 鍛煉七節頸椎的頸部張力活動,能够快 速且有效她復蘇頸椎神經,解决孩子上 課不專心的煩惱。



# Vertebra supports the balanced development of the left and right brain

The ability of focusing depends on the maturity of visual focal length. If you want to improve your child's ability to focus, first of all, we must stabilize their visual focus. Through a lot of neck extension activities in the sensory integration, the seven cervical vertebrae in the neck will recover quickly and efficiently, meanwhile, the children's concentration problems will be solved.



腰椎(5) Lumbar Vertebrae (5) \_\_\_\_\_ L1-L5

> 骶椎 Sacral Vertebrae (5 fused)



#### Intelligent Education Group



學習的構架之手服協調能力



## 手指活動激發孩子的大腦

手眼協調是指人通過眼睛接收 到的信息來控制手執行某任務 的能力。手部精細動作的協調 性影響我們彩色、畫畫、解决 迷宫、書寫、接球、拼圖、鄉 鞋帶、扣紐扣、玩積木、穿針 和使用剪刀等能力。

### 兒童的智力發展體現在指尖上

精細動作主要是控制小肌肉運動的能力。手 指關節發育不良將導致手和眼睛的協調功能 実調。寫字需要具備良好的精細運動技能, 因此缺乏此技能的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 需要花較長的孩子會覺得寫字很吃力, 書寫過程中,因爲他們的意 主意那些書寫幾素(例如空 間太小、間架結構)等。它影響了寫字速度、 問太小、間架結構)等。它影響了寫字速度、 書寫的空間估計能力(即寫字常出格或出幾) 以及字體的端正性而形成書寫障礙。





## 視覺對焦能力是手眼協調 發展的基礎

孩子如果没有視覺焦距的能力不僅對 眼球追踪發展不利,更間接影響了手 和眼睛的協調性,嚴重的案例將引發 學習困難以及專注力失調等現象。在 日常生活中,家長們也會發現孩子的靈 活性有待改善。例如:拿物品不穩導致 時常摔或掉東西的情况。



## Architecture of Learning Hand-eye Coordination

## Fine motor exercise stimulates brain development

Hand-eye coordination refers to the ability of the vision system to coordinate the information received through the eyes to control the hands to perform a task. It affects our ability to colour, draw pictures, solve mazes, write by hand, catch a ball, put a puzzle together, tie the shoelaces, button a shirt, build with blocks, thread a needle, use scissors and etc.

## Children's intelligence is on the tip of their fingers



Fine motor skills involve the use of the smaller muscle of the hands. Immature development of finger knuckles will cause poor hand-eye coordination. Fine motor skills are also associated with reading and writing, thus a child with poor hand-eye coordination may have poor handwriting and take longer to complete homework because their hands are lack of dexterity. In the process of writing, they need to guide themselves consciously to pay attention to those writing clues such as the size of the space, the structure of the gaps and etc. This affects the speed of writing, the ability to estimate the writing space (that is often writing outside the grid or line) and the correctness of the handwriting, and causes dysgraphia.



## Visual focus is the basis of the development of hand-eye coordination

If a child does not have visual focus, it not only is unfavorable for the development of eye-tracking, even affects the coordination of hands and eyes indirectly. Serious cases will trigger phenomenon such as learning difficulties and attention deficits. In everyday life, parents will also find that the agility of the child needs improving. For example, unstable when holding things and resulting in circumstances of breaking or dropping things frequently.



卓越感統訓練室創立的目的 The Objectives of Setting Up Intelligent Sensation Station



Sensory Integration Training is a series of well-planned vertebral training activities. It helps the limbs and body send sensory information to the brain through central nerves and the brain will process, analyze the information and make adjustments in body coordination. Thus, it can solve the children's unfocused and inattentive problems that result in learning difficulties.

### **感覺統合運動訓練** (簡稱感統訓練)

透過一系列有計劃性的脊椎活動,促 使身體各種感覺訊息透過中樞神經 將它輸入大腦,大腦再將傳來的感 覺信息進行思緒方面的分析、判斷 并處理以做出正確的反應使整個肢 體和諧有效地配搭,借此解决孩子 視而不見;聽而不開的狀態而引發 學習上的困難。

如:動作反應遲鈍、抄寫緩慢、上課 分心不能集中、記性不好、經常寫漏、 寫錯、寫倒反字等。



For example: movement not agile, slow copying, have difficulty concentrating in class, poor memory, omission of words, copying words incorrectly, word reversals and etc.

#### **Intelligent Education Group**



人體七節頸椎 The Seven Cervical Vertebrae of Human Body

頸部支撑力良好將促使感官發展順暢 Good neck support will promote smooth sensory development







視覺神經 Optic Nerve **平衔能力** Balance Ability **慈覺神經** Auditory Nerve

呈 C 狀的頸部姿態能够刺激頸椎神經的發育。頸 部神經發育不良將導致專注力失調,視覺與聽覺 發育不良。

The cervical curve in the neck is supposed to be a "C" shape. Only the normal curve can stimulate the development of cervical nerves. The immaturity of cervical nerves will result in attention deficit maturation of visual and auditory processing.



Normal Curve







3

6

頸椎神經根

Cervical Nerve Roots

反C状 Reversed Curve



## 肢體的協調性對孩子身體智慧的 發展極爲重要

Body Coordination is Important for Developing Body Wisdom

左右腦必須經過統一協調的工作,才能完成人類高級、復雜的認知及思考活動, 包括注意力、分析、想象、判斷和理解能力等。當大腦無法同時處理來自身體各 處的感覺信息時,它就會呈現消化不良的現象因而導致肢體不能有效地運作,嚴 重的案例會導致語言、學習與社交障礙。這種現象稱爲感覺統合失調,主要分爲 平衡統合、觸覺統合、本體感統合、前庭統合(視覺和聽覺)等四大部分。

Left and right brain must be coordinated in order to complete a series of advanced, complex cognitive and thinking activities of humans, which includes concentration, analysis, imagination, judgment, understanding and etc. When the brains are unable to process sensory information throughout the body simultaneously, it will appear a phenomenon of indigestion and result in body parts are unable to function effectively, and seriously would lead to language, learning and social obstacles. This phenomenon is called Sensory Integration Dysfunction. It can be divided into four parts: balanced integration, tactile integration, proprioceptive integration, vestibular integration (visual and auditory system).



**手衛統合** Balanced Integration 觸覺統合 Tactile Integration 本體感統合 Proprioceptive Integration