

视觉能力

卓越语音课程的核心价值是透过 闪卡训练来提升及修复学员的视觉

能力。视觉能力即视觉感知能力,它是解读眼睛在阅读或书写时所接收到的信息。它包含了:-





视觉记忆 Visual Memory



视觉辨识 Visual Discrimination



Visual Ability

The core value of the Intelligent Pronunciation Programme lies in enhancing and restoring students' visual abilities through flashcard training. Visual ability refers to the skills of visual perception, which are used to interpret the information received by the eyes when reading or writing. It includes:



The right brain is responsible for processing visual images.

视觉记忆能力

视觉记忆又称为照相记忆, 它利用右脑的记忆功能瞬间捕捉视觉信息进入右脑。

透过瞳孔将所见到的影像经视觉神经输入大脑处理变成图像。主要负责将所见的事物透过瞳孔投射进入右脑的储存库,但首要条件是必须确保具备良好发育的眼部肌肉神经、眼球追踪以及手眼协调能力。

Visual Memory

Visual memory, also known as photographic memory, utilizes the memory function of the right brain to rapidly capture and retain visual information.

Through the pupil, the images seen are transmitted via the visual nerves to the brain for processing and transformed into visual images. This process primarily involves projecting what is seen through the pupils into the storage of the right brain. However, the primary requirement is to ensure well-developed eye muscle nerves, eye tracking and hand-eye coordination abilities.





视觉辨识能力 视觉辨识能力是思考能力的基础 也是学习的必备工具之一

卓越语音课程训练的过程中,系统要求学员在华文汉字中找出语音所指定的笔画以及部首。有视觉辨别问题的孩子常常无法分辨字与字之间的不同。此功能性失调将引发学习困难或障碍等状况。







请辨识哪两个汉堡是假的 Please identify which two hamburgers are fake.

Visual Discrimination Ability

Visual discrimination ability is the foundation of thinking skills and one of the essential tools for learning.

During the training process of the Intelligent Pronunciation Programme, students are required to identify the specified strokes and radicals in Chinese characters. Children with poor visual discrimination often struggle to differentiate between words. This dysfunction can lead to learning difficulties or disorders.

语言表达能力的基础也是建立在优质的辨识能力之上

The Development of Expressive Language Skills Also Relies on High-quality Discrimination Abilities



视觉辨识能力

视觉辨识是指学生能够对物体、线条、图形或文字进行辨别的能力。表现在文字上的例子:-



- ▶无法观察到"风"与"凤"的差别
- ▶无法分辨字母"b"与"d"或"p"与"q"
- 无法分辨左和右



Visual Discrimination

Visual discrimination refers to a student's ability to distinguish objects, lines, shapes or characters. Here are some examples related to written text:



Cannot distinguish between the letters 'b' and 'd' or 'p' and 'q'.

Unable to distinguish between left and right.

视觉分辨能力不足不仅会影响孩子对文字的辨认,还会影响他们对事物进行归类、比较、分析等抽象能力的发展。

Poor visual discrimination ability will not only affect children's recognition of words, but also impact the development of their abstract abilities such as categorization, comparison and analysis of objects.

例如:

For example:





眼球追踪能力

视觉肌肉发育不良导致眼球 无法进行左右移动以及 上下转动

眼球追踪能力是指眼睛能有效地从左到右注视或 追踪某一个活动物体的能力,在学习上体现于 阅读和抄写。



Eye-Tracking Skills

The underdeveloped visual muscles can cause the eyeballs to be unable to perform left-right and up-down movements.

Eye-tracking ability refers to the ability of the eyes to effectively watch or track a moving object from left to right, which is essential in reading and copying during the learning process.

发展眼球对焦能力是解决专注力失调的唯一途径

眼部四周覆盖了六条眼部肌肉以控制眼球的移动。 眼部肌肉发育不良会导致眼球不能准确对焦在文字、人或物体上。

- 若对焦在文字上且视线能够跟随文字移动, 称之为眼球追踪能力
- 若与人对焦(即与其进行目光交流), 称之为眼神交流
- 若能够注视物体,它被称为对焦能力

Developing eye focus ability is the only way to solve attention deficit

Six eye muscles surrounding the periphery of the eyes control eye movement. Inadequate development of the eye muscles can lead to inaccurate eye focus on text, people or objects.

- If the focus is on text and the gaze can follow the movement of the text, it is called eye-tracking ability.
- If there is a focus on a person, it is called eye contact.
- If the ability is to focus on an object, it is referred to as focusing ability.



3 上斜肌 Superior Oblique

4上直肌 Superior Rectus

Lateral Rectus 外直肌 2

Inferior Oblique 下斜肌



六条眼部肌肉横切面图 The Six Muscles of the Eye

下直肌 Inferior Rectus



→ 六条眼部肌肉神经的良好发育,确保眼球能够对焦

- ▶ 眼球对焦能力稳定促使孩子能够注视课本或白板,进行追踪式的学习
- ▶ 眼球就像摄像镜头,将老师讲解的信息投影进入右脑进行分析和理解
- > 缺乏眼球焦距的稳定性有如盲人看着课本一样, 心有余而力不足
- 专注力失调是其原因之一





Well-developed nerves of the six eye muscles to ensure proper eye focusing.

- A stable ability to focus the eyes enables children to concentrate on textbooks or whiteboards for tracking-style learning.
- The eyeball functions like a camera lens, projecting the information provided by the teacher into the right brain for analysis and understanding.
- A lack of stable focal length is just like a blind person attempting to read a textbook, with inadequate capability.
- Imbalance in concentration is one of the contributing factors.



眼球依据以下四个阶段完成整个追踪的步骤: Eye tracking involves a series of steps as follows:



对焦 Focus



移动 Movement



整合 Integration



结论 Conclusion

这一连串的过程就是所谓的理解能力 This process is known as comprehension ability

- 1 眼睛对焦在一个文字上
- 2 眼睛从该字由左向右移动以进行文字追踪
- 大脑接收视觉与听觉信息后进行整合 文字透过视觉神经输入大脑



声波透过听觉神经输入大脑

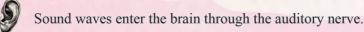
4 大脑将视听觉信息进行配对、审核、分析、推理最后得出结论

Eye-Tracking



- The eyes focus on a word.
- The eyes move from left to right to track the text.
- The brain integrates visual and auditory information after receiving it.





The brain processes visual and auditory information by matching, verifying, analyzing and reasoning to draw conclusions.



眼球追踪

- 缺乏眼球对焦能力导致孩子对老师的课业讲解
- > 引发对学习产生抗拒的心理状态

Children are the torchbearer of the future. Hence, every school celebrates this day with various events like quiz, debates, cultural programs like dance, music, and drama.

Teachers organize and perform events for the students.

Many schools also celebrate invite children from nearby, school together Such ges accommodate everyone from equality among students.

achers and parents on th

sports events. School teachers often icipate with the students of the s the children learn to share and ch gestures also instill a sense of

ir love and affection towards the child



Eye Tracking

- Insufficient eye focusing ability leads to a lack of understanding of the teacher's explanations.
- It will trigger a psychological state of resistance towards learning.



手眼协调

- > 书写能力的基础在于手和眼睛的配搭
- > 缺乏手眼协调导致孩子抗拒做作业而影响了学习

Hand-Eye Coordination

- The foundation of handwriting ability lies in the coordination between the hand and eyes.
- Lack of hand-eye coordination leads to a resistance to doing homework and affects learning.



倾听能力

"倾听"与"听"截然不同 "听"不需要思索

"倾听"则需要大脑对所接收的声波信息进行处理

卓越语音课程的主要宗旨是培养学员视听觉感官之间的配搭与 协调能力。首先,第一个步骤是开启他们的倾听能力。 倾听能力是一个被人们忽视的重要学习工具, 也是学员建立内 在自信的一个重要配备。





The main objective of the Intelligent Pronunciation Programme is to cultivate coordination and integration between students' visual and auditory senses. The first step is to activate their listening skills.

Listening ability is an important yet often overlooked tool for learning and a crucial asset for students to build inner confidence. 倾听



倾听能力

良好的倾听能力取决于内耳神经系统 对声音的察知、分辩与识别等过程。

耳蜗将所收集的声波经由内耳神经传送到大脑进行分析,即称为声音的识辨。

Listening Ability

Good listening ability depends on the processes of inner ear nervous system to detect, distinguish and identify sounds. The cochlea transmits collected sound waves through the inner ear nerves to the brain for analysis, a process known as sound discrimination.

倾听能力不仅局限在语言,还包括其他方面: -This ability extends beyond language and includes various aspects:

- 敲打声 Tapping Sounds
 - 硬体 (清脆响亮) Hard objects (clear and loud sounds)
 - 软体 (轻声涣散)
 Soft objects (gentle and diffuse sounds)
- 4 噪音 Noise
 - 高平调 (吶喊声) High pitch (a shouting sound)
 - 中平调 (机器操作的响声)
 Middle pitch
 Such as the noise generated by machinery
 - 低平调 (远处吸尘机的声音)
 Low pitch
 Such as the distant hum of a vacuum cleaner
- 6 语音 Crass

Speech Sounds

不同语言拥有不同的语音结构

Different languages have distinct phonetic structures

- 马来语— 主要由a, e, i, o, u 配搭辅音组成单词
 Malay Primarily composed of vowels (a, e, i, o, u) paired with consonants to form words.
- 华语 由笔画和部首配合四声构成单词 Chinese Words are formed through strokes and radicals with four tones.
- 英语 由元音和辅音配搭组合成单词 English Words are composed of combinations of vowels and consonants.



音乐之声

Musical Sounds

- 节奏 Rhythm
- 曲调 Melody
- 和声 Harmony



41 10

撞击声

轻声Light

Impact Sounds

● 重声 Heavy



自然界的声音 Sounds of Nature

- 动物发出的叫声 Vocalizations of animals
- 雨声

The sound of raindrops falling

● 风声

The sound of wind blowing

● 水声

Water sounds







卓越语音课程透过倾听训练学员音感配件的装备。关于倾听能力的详情:-

必须用心聆听 培养孩子的专注力 加强内耳收集声音的速度

反应能力 不仅仅是听,还需要给予及时的反应 借由反应衍生速度的要求



The Intelligent Pronunciation Programme equips students with the essential component of sound perception through listening training. The details about listening skills:

Listening with attentiveness

To cultivate children's focus

To enhance the speed of sound collection by the inner ear

Thinking ability

The brain needs to carry out a series of information processing after receiving sound waves

Promoting the development of thinking abilities

Responsive ability
It's not just about listening, but also providing immediate responses
Speed requirement derived from reactions

关于听感能力的训练详情:



听觉能力是建立听感的前提

- 听觉是指大脑对声音的感知能力

- 听感是指大脑能正确无误地分析声波的 能力



听感能力可以推动音感的组建 音感是指大脑以自然反应解读所收到的声波, 也可 称为"音准"

听感能力 **Auditory Perception**

The details about auditory perception & training:

- Hearing ability is a prerequisite for auditory perception.
 - Hearing refers to the brain's ability to perceive sound.
 - Auditory perception refers to the brain's ability to analyse sound waves accurately.
- Auditory perception can facilitate the formation of sound perception. Sound perception refers to the brain's natural response to interpreting received sound waves, also known as "pitch accuracy".

音感涉及的领域:

语言 大脑在音调与发音方面都 准确无误

大脑对调子的精准拿捏



歌唱

大脑的指挥准确度高, 不会走音或

走调

舞蹈

大脑掌控节奏

Areas involved in sound perception:

Language

The brain is accurate in intonation and pronunciation.

Music

The brain has precise control over tones.

Singing

The brain demonstrates high accuracy in pitch control, avoiding off-key singing.

Dancing The brain controls the rhythm.





听觉感知能力(简称听感)

听觉是指孩子对声音的察知、分辨与识别能力。只有具备这些能力,大脑才能理解所输入的声音并付诸行动(即作出反应)。听觉能力不仅是发展语言能力的基石,也是开发听觉记忆的基础。它涵盖了听觉记忆以及辨音能力两方面。

卓越语音课程着重于开启学员的听感功能。过程中, 电子书以频密的节奏不断透过语音系统将声波输入学员的大脑中, 以进行声波的分析与判断。



Auditory Perceptual Skills (Auditory Perception)

The auditory sense refers to a child's ability to perceive, distinguish and identify sounds. Only with these abilities can the brain understand the sounds input and convert them into actions (reactions). Auditory ability is not only the cornerstone for developing language skills, but also the foundation for cultivating auditory memory. It covers both auditory memory and auditory discrimination skills.

The Intelligent Pronunciation Programme places a strong emphasis on the development of students' auditory perception abilities. During the process, the e-book continuously delivers sound waves to students' brains through the audio system at a frequent rhythm, enabling the analysis and judgment of the sound waves.

右脑需要对声波进行重复式的"播放"以强化听觉记忆

大脑对声波的整合能力可由学员的外在表现评估他们是否已经具备了音感功能。

The right brain needs to "play back" the sound waves repeatedly to strengthen auditory memory

The integration capacity of the brain to sound waves can be evaluated through students' external performance to determine whether they have acquired the auditory perception skills.



大脑需要将听觉神经所输入的声波 进行三个步骤的处理



- "分析"的过程称之为辨音能力
- ▶学习音乐有助于启发孩子的辨音能力
- ▶大脑需要对所听到的声音进行音阶分析
- ▶过程中能够同时刺激并提升听觉记忆



"处理" 声波进行推理的过程被称为思维能力

- ▶ 左脑透过眼睛所看到的信息进行思考例如:课本
- ▶ 右脑透过耳朵所听到的信息进行思考例如:老师的讲解
- ▶ 右脑能够对所听到的信息进行思考有赖于全方位的听感功能。



Processing



将声波"储存"的过程称为听觉记忆。右脑将声音储存的记忆分为两种:

> 短期记忆

> 长期记忆

The brain needs to process the sound waves received through the auditory nerve in three steps.



The process of "analysis" is known as auditory discrimination ability.

- Learning music helps in developing children's auditory discrimination skills.
- ▶ The brain needs to analyse the sound waves heard in terms of musical notes.
- During the process, it can stimulate and enhance auditory memory at the same time.



The process of "processing" sound waves through reasoning is known as thinking ability.

- ▶ The left brain processes information seen through the eyes for thinking. e.g. textbooks
- The right brain processes information heard through the ears for thinking. e.g. teachers' explanations
- The right brain's ability to think about what is heard depends on comprehensive auditory perception.



The process of **"storing"** sound waves is known as auditory memory. The right brain divides the sound memory into two types:

Short-term memory

Long-term memory



听觉记忆

听觉记忆又称为回声记忆,是指对所听到 的声波提取信息的能力,即存储和回忆

所听到的声音信息的能力。它是指声波通过内耳输入大脑后, 将信息进行储存的过程。

知识的摄取来自于优质的听觉记忆

孩子在学校需要依靠听觉记忆以顺利完成整个学习过程, 它包括:

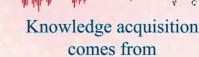
- > 学习语法知识
- 老师的课堂讲解
- 回答老师的提问
- > 老师交代的功课



Auditory Memory

Auditory memory, also known as echoic memory, refers to the ability to extract information from the sound waves heard, as well as the ability to store and recall auditory information. It describes the process of storing information after sound waves are transmitted into the brain through the inner ear.





good auditory memory

In school, children rely on auditory memory to smoothly complete the entire learning process, including:

- > Learning grammar knowledge
- > Listening to the teacher's explanations in class
- Answering the teacher's questions
- > Completing homework assigned by the teacher

