

AFFECTIVE NETWORKS:  
THE **WHY** OF LEARNING



RECOGNITION NETWORKS:  
THE **WHAT** OF LEARNING



STRATEGIC NETWORKS:  
THE **HOW** OF LEARNING



# Getting to know me

Learning styles



**IncluEdu**  
where learning is inclusive



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## *Session Aim:*

*In this module we will look at understanding the implications of different learning styles on my teaching and the principles of universal design for learning*



AFFECTIVE NETWORKS:  
THE **WHY** OF LEARNING



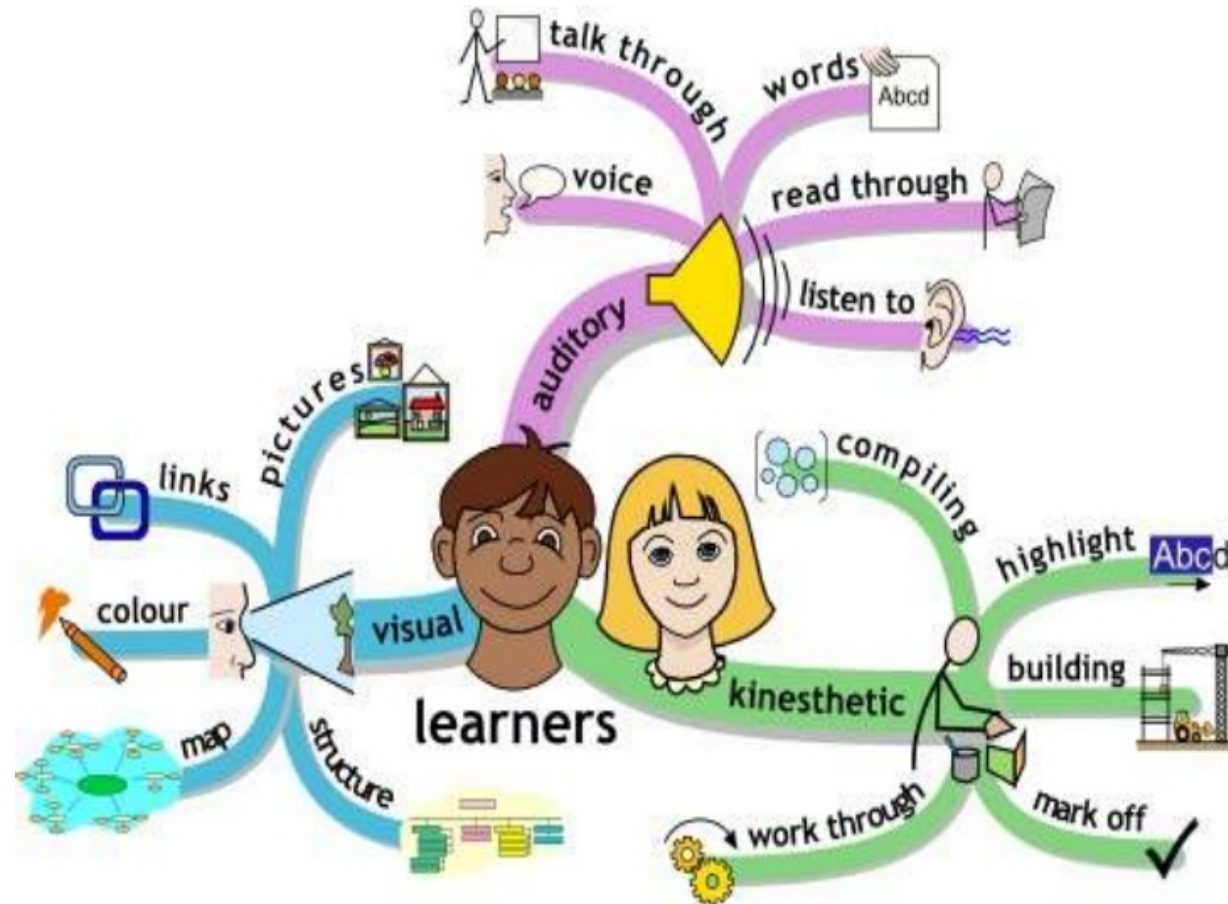
RECOGNITION NETWORKS:  
THE **WHAT** OF LEARNING



STRATEGIC NETWORKS:  
THE **HOW** OF LEARNING



# Learning Styles



Visual  
SEE IT



Auditory  
HEAR IT

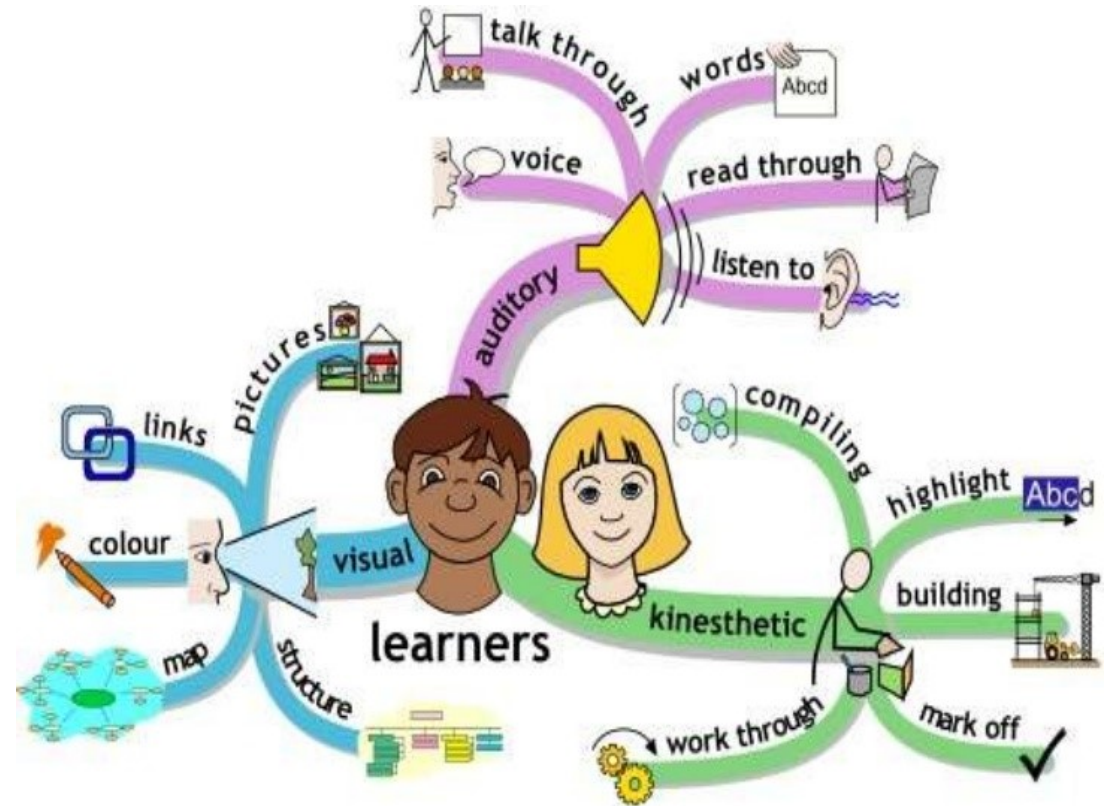


Kinesthetic  
DO IT



# Visual learners

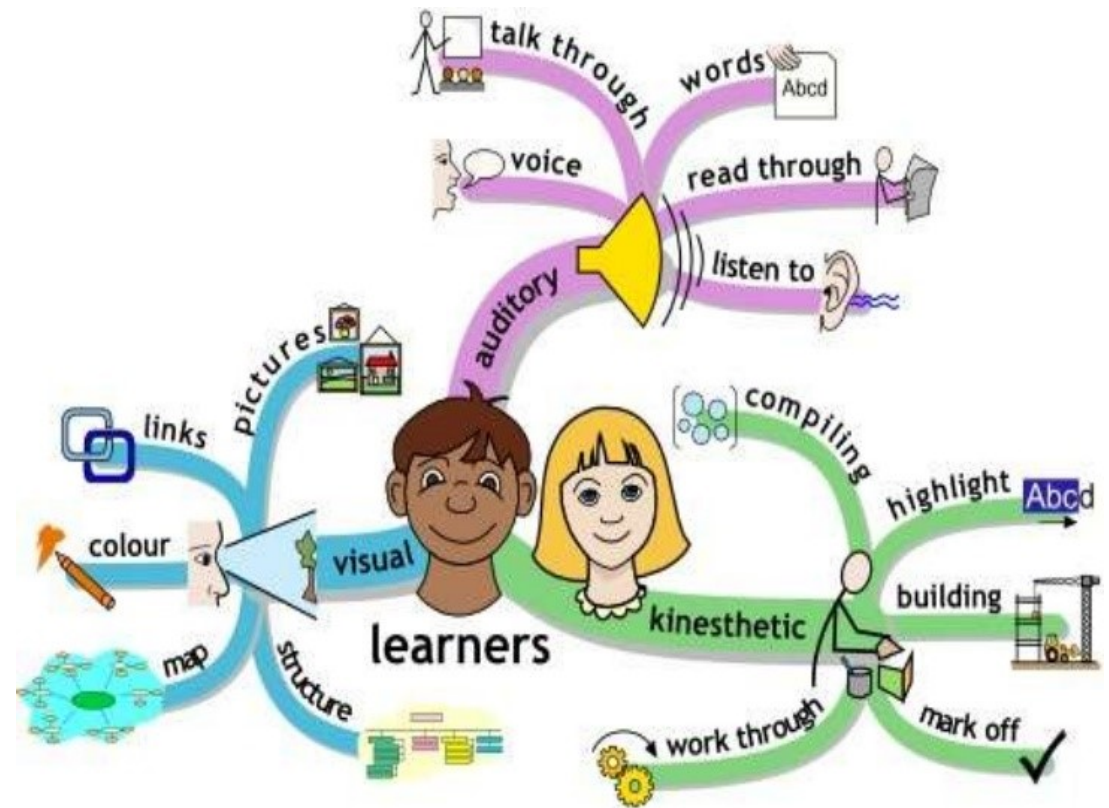
- What is important to visual learners: graphs, diagrams, maps, illustrations, body language, images, videos, colour.
- Visual students remember visually (in images)
- They need quiet space to work things through.





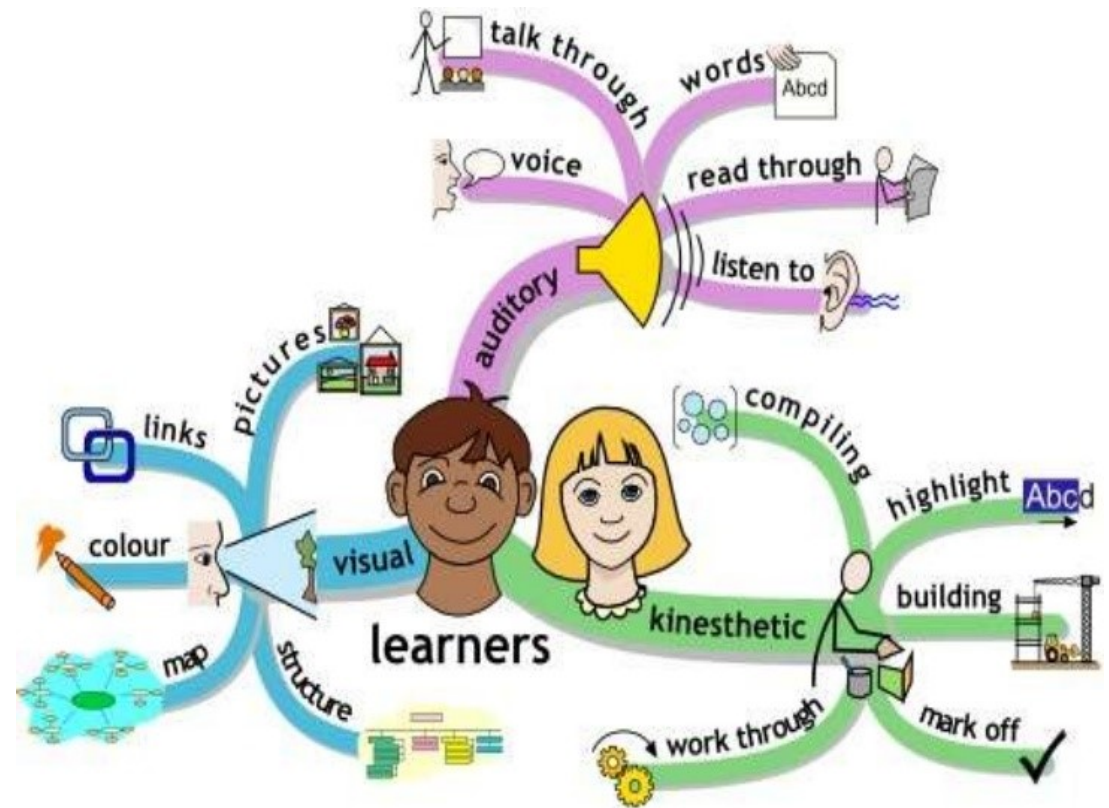
# Auditory learners

- The main way of learning is through hearing and speaking.
- Speaking, talking things through, reading, discussing, memorising and listening are important to them.
- They like working in groups and talk things over with others.



# Kinesthetic learners

- What is important to kinesthetic learners: making, compiling, building, working things through, exploring, doing, and discovering.
- Kinesthetic students remember the experience.
- They need to be engaged in activities that enable them to explore or act out.



# Brain Gym - Activity 1

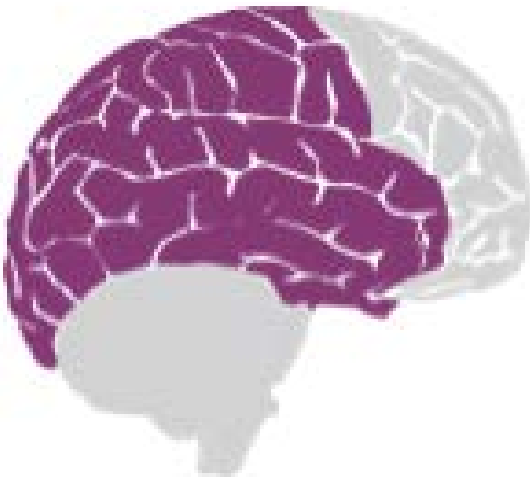


- <https://www.youtube.com/watch?v=IUUNCKF0YhQ>

# Universal Design Principles

## Centre for Applied Special Technology (CAST)

- **Principles 1: Provide Multiple Means of Representation**
- **Principles 2: Provide Multiples Means of Action and Expression**
- **Principles 3: Provide Multiple Means of Engagement**





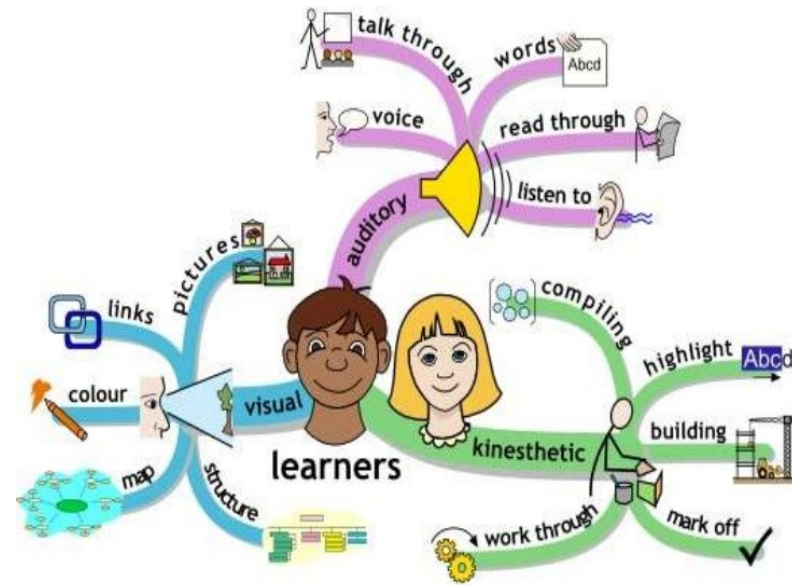
# CAST: Transforming education through Universal Design for Learning. <http://www.cast.org>



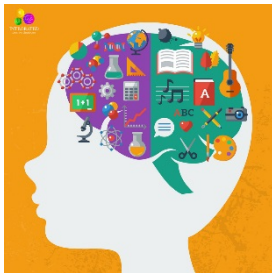
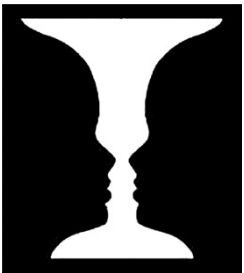
[Watch the animation :](https://youtu.be/bDvKnY0g6e4)  
<https://youtu.be/bDvKnY0g6e4>

# Principles 1: Provide Multiple Means of Representation

- Perception
- Language and symbol
- Comprehension



**Recognition Networks**  
The "what" of learning



# Principles 1: Provide Multiple Means of Representation



- Consider Perception:
    - experience
    - motivational state
    - emotional state
    - physical
  - ✓ Customisable display of information
  - ✓ Alternatives for auditory information
  - ✓ Alternatives for visual information
- 
- Ensure that key information is equally perceivable by all learners
  - Provide multiple options for the same information and allow adjustments e.g. sound levels, text size

# Principles 1: Provide Multiple Means of Representation

- Language and symbol – consider learners' cultural difference
  - ✓ Clarify vocabulary and symbols
  - ✓ Clarify syntax and structure
  - ✓ Support decoding text, mathematical notation, and symbols
  - ✓ Promote understanding across languages
  - ✓ Illustrate through multiple media



# Principles 1: Provide Multiple Means of Representation

Recognition  
Networks  
The "what" of learning

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- Comprehension
  - ✓ Activate or supply background knowledge
  - ✓ Highlight patterns, critical features, big ideas, and relationships
  - ✓ Guide information processing, visualisation, and manipulation
  - ✓ Maximise transfer and generalization



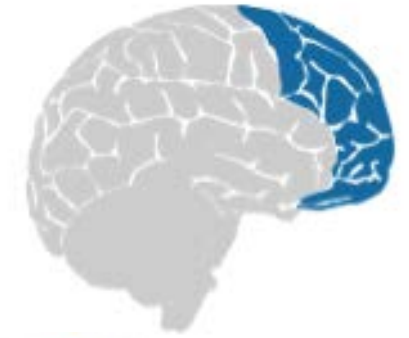


# Brain Gym - Activity 2



- <https://www.youtube.com/watch?v=t-H3aUjPP4E>

# Principles 2: Provide Multiples Means of Action and Expression



*The aim is to have strategic, goal directed learners*

- Physical Action
- Expressive skills and fluency
- Executive function



# Principles 2: Provide Multiples Means of Action and Expression



- **Physical Action**

- ✓ Switches
- ✓ Accessible settings
- ✓ Voice recognition
- ✓ Guided access

*Teachers' role is to optimise access for all of their learners*



# Principles 2: Provide Multiples Means of Action and Expression

- **Expressive skills and fluency** – provide students options for expression and communication – different students can demonstrate their learning using different media e.g.
  - ✓ Video
  - ✓ Photo story
  - ✓ Animation
  - ✓ Wiki
  - ✓ Presentation
  - ✓ Facebook page
  - ✓ Series of tweets
  - ✓ Goal? – Write an essay?
  - ✓ Tool for planning and organising ideas e.g.
    - ✓ mind mapping
    - ✓ sticky notes
    - ✓ sound recording etc





# Principles 2: Provide Multiples Means of Action and Expression



- **Executive function**

- ✓ Guiding students in goal setting – so that they don't aim too high or too low.
- ✓ Guiding students in support planning and strategy development
- ✓ Guiding students in managing information and resources
- ✓ Guiding students in monitoring their own progress





# Principles 3: Provide Multiple Means of Engagement

- Recruiting interest
- Sustaining efforts and persistence
- Self-regulation

**Affect** – this is crucial element to learning, different students have different level of engagement and motivation. This could be influenced by: neurological, cultural, personal relevance, subjectivity, background knowledge. Some learners are spontaneous and others might be frightened. Some may like to work alone, others prefer groups.



# Principles 3: Provide Multiple Means of Engagement

- Recruiting interest
  - ✓ Provide students with greater choice and autonomy
  - ✓ Provide students with options that enhance the relevance, value and authenticity
  - ✓ Provide students with options that reduce threats and distractions



# Principles 3: Provide Multiple Means of Engagement

- Sustaining efforts and persistence
  - ✓ Provide options that help students to stay motivated to reach their goals and objectives
  - ✓ Provide students with options that vary with levels of challenge and support
  - ✓ Provide options for students that foster collaboration and communication
  - ✓ Provide students with options that increase mastery-oriented feedback



# Principles 3: Provide Multiple Means of Engagement

- Self-regulation
  - ✓ Provide students with options that guide their personal goal-setting and expectations
  - ✓ Provide students with options that scaffold coping skills and strategies
  - ✓ Provide students with options to develop self-assessment and reflection





# Brain Gym - Activity 3



- <https://www.youtube.com/watch?v=MOUdmzaZrc8>



# Summary

- ✓ Each learner is different.
- ✓ The context within typical learning settings is 'limiting' and 'disabling.'
- ✓ By meeting the needs of learners who are disabled by typical learning contexts, we will meet the needs of everyone.

