Identifying Needs: Cognition & Learning

Observed difficulties may be emerging or fluctuating.





Logo created by "Doncaster Young Advisors"

Definition

Cognitive functioning refers to: executive functions, (thinking, reasoning, attention, working memory, problem solving and decision making), literacy, numeracy and a learners' understanding of the social world (social cognition).

Learning refers to the learners' acquisition, consolidation, retaining and application of previous and new knowledge and skills.

General Cognition and Learning

- Acquiring and using new skills
- Imaginative play
- Having the skills to access knowledge and apply their learning
- Remembering regular routines
- Following the daily timetable or routine
- Repetitive play and restricted interests
- Applying knowledge and skills to different situations and contexts.
- The **pace** of the curriculum
- Exploring materials and resources

Executive Functioning

Working Memory

Attention

Response inhibition

Flexibility

Task Initiation

Emotional Control

Goal directed persistence

Metacognition

Planning and prioritisation

Organisation

Time management

Executive Function: Working Memory

- Following instructions
- Following multi-step instructions
- Remembering answers
- Blending and segmenting phonics
- Completing mental maths due to processing demands

Executive Function: Sustained attention

- Completing tasks
- Maintaining focus on an adult-led task.
- **Taking in information** due to inattentiveness
- **Understanding what to do** before starting work

Executive Function-Response Inhibition

- Resisting the impulse to call out or interrupt
- **Ignoring distractions** and maintaining focus

Executive Function: Flexibility

- **Open ended activities** such as creative writing
- Managing changes in routines
- Accepting alternatives within a task or situation

Executive Function-Task Initiation

- Starting a task
- Making decisions
- **Procrastination** e.g. leaving homework until the last minute

Executive Function-Emotional Control

- Managing emotions e.g. around peer disagreements
- Emotional outbursts
- Feeling overwhelmed
- Appearing to shut down

Executive Function: Goal directed persistence

- Starting a piece of work/project with a clear goal in mind
- Making choices to stick to a plan
- Maintaining focus in the face of challenges

Executive Function: Metacognition

- Analysing, reflecting and adapting approaches to learning
- Knowing how to tackle a task
- Knowing what strategies they can use
- **Knowing what resources** they can use to support them
- **Exploring** and **explaining** their **thought processes** in a way that is understood

Executive Function-Planning and prioritisation

- Recognising the **steps to achieve a goal**
- Managing the need for **perfection**
- **Organising** their **thoughts and actions** e.g. they may not start a task at the beginning

Executive Function-Organisation

- Organising their resources
- Losing resources, equipment and belongings
- Managing time restraints
- Needing to restart activities from the beginning
- **Categorising** or seeing how things connect with one another e.g. the animals that live on a farm
- Sequencing information

Executive Function-Time Management

- **Allowing enough time** to complete tasks
- Sticking to a time schedule
- Completing tasks

Literacy-Reading, Writing and Spelling

- Decoding words
- Reading fluently
- Understanding what they have read- may find it easier to understand when read to
- Mark making and making purposeful marks
- Forming letters correctly
- Writing in full sentences
- Transferring what they want to say into writing
- Spelling words, including familiar words, correctly

Numeracy

- Understanding that numbers represent quantity
- Understanding mathematical concepts e.g. subitising, cardinality,
 estimation, sequencing, ordering and place value
- Calculating and following mathematical procedures (e.g. addition and subtraction)
- Identifying mathematical patterns
- Understanding mathematical vocabulary

Comprehension

- Understanding some abstract concepts such as rhymes, inference and time
- Interpreting complex social interactions
- Understanding instructions



Short Term Memory

- Recalling what has just been said or read
- Locating something that they had just a moment ago



Long Term Memory

- Talking about the past
- Relating to experiences from their past
- Completing multistage activities
- Recalling information
- Retaining concepts over time
- Maintaining previously acquired skills
- Making links with previously learnt concepts



Emotional/Affective learning factors

- Asking for, accepting or responding to adult or peer assistance
- **Tolerating frustration** and having the confidence to 'have a go'
- Self-efficacy- feeling they can succeed
- **Interest and curiosity** e.g. asking questions to find out new things