

# Supplementary Material

Article



# Utilizing Interactive Surfaces to Enhance Learning, Collaboration and Engagement: Insights from Learners' Gaze and Speech

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# Pre-test

A. Gender:

B. Age:

C. Previous experience with technology

1	2	3	4	5	6	7
Not at all						Very Much

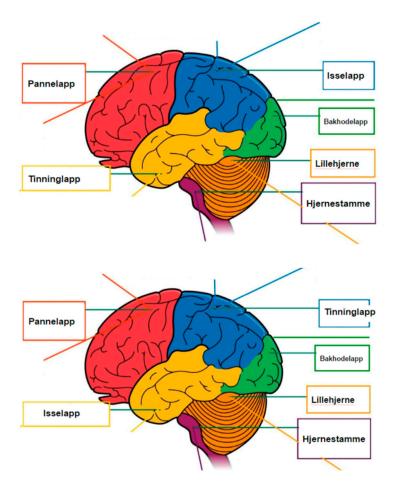
D. Previous experience with touch screens (e.g., big screens, ipads, mobile devices)

1 2 3 4 5 6 7 Not at all Very Much

E. Previous experience with big touch screens (bigger than a laptop size)

1	2	3	4	5	6	7
Not at all						Very Much

1. Which image shows the correct placement of the parietal and temporal lobes?



#### 2. More boys than girls have dyslexia

#### False, longitudinal research shows as many girls are affected as boys

#### True, this is linked with boys neurologically maturing later

- 3. Dyslexia affects \_\_\_\_% of the population and often occurs with \_\_\_\_\_
- 4. Which part of the brain is most closely associated with ADHD?

# left-sided prefrontal cortex

#### right-sided prefrontal cortex

5. What is the cause of ADHD?

#### In a majority of cases, this is unfortunately unknown

#### The vast majority of cases have a causal link to population density

6. Which image shows the part of the brain affected by temporal lobe epilepsy?



7. What is the amygdala responsible for?

# **Decision making**

### Long-term memory

8. What the thalamus responsible for?

# Short term memory

# Sleep

9. Which image shows the thalamus?



10. Which part of the brain is responsible for language and attention?

Cerebellum []

Hippocampus SEP

# First post-test

1. Which gland produces insulin?

# Pancreas

# Pituitary

2. What are the common symptoms of dyslexia?

Trouble reading

# Insomnia

3. Which brain functions are affected by ADHD?

The left-sided prefrontal cortex.

# The right-sided prefrontal cortex.

4. Which image shows the part of the brain associated with ADHD?



5. What is the most common cause of temporal lobe epilepsy?

# Traumatic brain injury

# Headache

6. What treatments are effective for sufferers of temporal lobe epilepsy?

# Antiepileptic drugs and surgical interventions

No treatment

7. Which region of the brain stores long term memory?

Hippocampus SEP

Thalamus SEP

8. What is the function of the hypothalamus

Body temperature **SEP** 

Emotions [SEP]

9. Which part of the brain controls body temperature?

Hypothalamus [SEP]

Amygdala [1]

10. The cerebellum is responsible for \_\_\_\_\_

Language and attention

Short time memory [1]

# Second post-test

1. What is the name of the hormone the testes produce?

# Testosterone

# Insuline

2. Which image shows the part of the brain associated with dyslexia?



### 3. What is the most common symptom of ADHD?

### **Problems paying attention**

# Abnormal aging

4. The temporal lobe is associated with temporal lobe epilepsy, which image points to the temporal lobe?



5. What is the most common symptom of temporal lobe epilepsy?

#### Lack of attention

### Simple partial seizures

6. Which part of the brain is responsible for long-term memory?

#### Hypothalamus

#### Hippocampus

7. Which part of the brain regulates body temperature and hunger control?

# Hypothalamus

# Hippocampus

8. What is the function of the cerebellum?

# Language and attention

# Sleep and sensory interpretation

9. What is the function of the thalamus?

Language and attention

# Sleep and sensory interpretation

10. What is the most common name for neurons?

Nerve Cells

**Brain Cells**