

## Core Strength and Classroom Function

### Understanding Prone Extension, Supine Flexion, and Plank

Testing supine flexion, prone extension, and plank positions provides occupational therapists with a quick, functional assessment of a child's core strength and postural control — essential foundations for sitting, writing, learning, and moving effectively at school.

#### Supine Flexion (“Egg Pose”)

What it tests:

- Front body/core strength — primarily the rectus abdominis, obliques, and hip flexors.
- The student lies on their back, brings knees toward the chest, and lifts the head and shoulders.

If difficult, the student may have:

- Weak abdominal or hip flexor muscles
- Limited flexor tone or midline control

This may look like:

- Slumped sitting posture
- Fatigue during writing or table work
- Difficulty with fine-motor coordination (e.g., handwriting, cutting)
- Trouble sitting up from the floor or changing positions

#### Prone Extension (“Superman Pose”)

What it tests:

- Back-body or posterior chain muscles — including the erector spinae, glutes, and scapular stabilizers.
- The student lies on their stomach and lifts arms and legs off the floor.

If difficult, the student may have:

- Weak back extensors or glutes
- Poor scapular and shoulder stability

This may look like:

- Slouched posture when sitting or standing
- Decreased postural endurance
- Limited gross-motor coordination (e.g., running, jumping)
- Difficulty copying from the board or maintaining visual focus

## Plank

What it tests:

- Isometric (static) core endurance — the ability to hold the body in a straight line against gravity.
- Engages the abdominals, obliques, back extensors, glutes, quads, and shoulders simultaneously.

Why it's harder:

- Requires sustained co-activation of multiple muscle groups.
- Tests whole-body stability instead of isolated flexion or extension.
- Demands shoulder and upper-body endurance to maintain alignment.

If difficult, the student may show:

- Hips sagging or arching
- Quick fatigue
- Shoulder “winging” or instability

## Low Muscle Tone (Hypotonia) and Core Tasks

Children with low muscle tone often find supine flexion and prone extension easier than plank because:

- Gravity supports them in lying positions.
- These tasks isolate specific muscles rather than requiring full-body stability.

In contrast, a plank requires:

- Continuous, full-body activation
- Strong shoulder and trunk stability
- Endurance to maintain posture — challenging for low-tone muscles that fatigue quickly

## Why Teachers and Parents Should Care

Core strength supports:

- Upright sitting and posture for learning
- Endurance for writing and fine-motor tasks
- Efficient movement during PE and play
- Visual attention and copying from the board

Observing a child's ability to hold these positions can give valuable clues about postural control, endurance, and coordination that impact classroom participation every day.

(For educational purposes only. Contact your school occupational therapist for assessment or individualized strategies.)