# Group Members;

**1.CHRISTABEL NARH -11245595**

**2. SAMUEL PEPRAH 11145341**

**3.KELVIN ANTWI BOSIAKO**

**4.CHRISTIAN NEEQUAYE**

**5.GIFTY AGBOVI**

# Group 2 - Occupation-Based Activity Analysis: Tying Shoelaces

## 1. Description of the Activity

- Occupation: Self-care (ADL), Grooming (dressing).

- Context:

• Physical Environment: Typically performed at home (bedroom/entryway) or school while sitted on a flat surface like a chair and can be performed also by squatting instead of sitting.

• Social Environment: Initially caregiver-assisted(parent), progressing to independent performance.

• Temporal: Embedded in morning/night routines or before outdoor play.

## 2. Activity Demands

- Objects, Tools, & Materials: Shoelaces, shoes (preferably with contrasting colors for visual cues), chair, a good light to be able to complete the activity.

- Space & Social Demands: Requires stable seating, a free space and may involve peer modeling in school settings. And if it’s performed at home the child may need the assistance of caregiver.

- Required Actions & Performance Skills:

• Motor Skills: Bilateral coordination, pincer grasp, manual dexterity, hand and eye coordination.

• Process Skills: Initiation, Sequencing, problem-solving, attention and concentration.

• Social Interaction Skills: May request help from caregivers or peers, may also observe peers.

- Body Functions & Structures:

• Neuromuscular: Finger strength, core/postural stability.

• Sensory: Tactile discrimination, visual acuity

• Cognitive: Executive function, working memory.

## 3. Client Factors & Performance Patterns

- Client Factors:

• Motor: Hand strength, in-hand manipulation.

• Cognitive: Ability to follow multi-step directions.

• Sensory:

1.Tactile: To feel the texture of the laces and the shoe, and to manipulate the laces effectively.

2. Vision: To see the laces, the shoe, and their hands while coordinating the lacing process.

3. Proprioception: To understand hand positioning and pressure while pulling the laces tight.

4. Vestibular: To maintain balance, especially if they are sitting , standing or squatting while lacing shoes.- Performance Patterns:

• Habits: Consistent practice of the activity reinforces mastery so with time the child gains independence in shoe lacing.

• Routines: when it’s embedded in dressing sequence, with time the child becomes familiar with the activity and becomes a routine in dressing activity for the child.

• Roles:

1. Personal Responsibility: The child sees themselves as responsible for their own dressing. This role motivates them to learn and practice shoe lacing, enhancing their independence.

2. Social Influence: The child's role as a learner or family member may involve observing and imitating others (like parents or siblings) when they lace their shoes, reinforcing the skill through social interaction.

3. Identity Development: As the child takes on the role of a student, they may feel a sense of pride in mastering shoe lacing, contributing to their self-esteem and confidence.

## 4. Family Role: Engaging in shoe lacing as part of getting ready with family members fosters a sense of belonging and cooperation, making the activity more enjoyable and meaningful.

## 4. Grading & Adaptation

- Grading:

• Easier: Use chunky laces or practice boards.

• Harder: Add time more trials or distractions, and reducing the time.

- Adaptations:

• Motor Challenges: Elastic laces, loop-and-toggle systems.

• Cognitive Challenges: Visual prompts, backward chaining.

## 5. Clinical Reasoning

- Intervention Alignment:

• Target motor planning and attention through routine repetition.

• Promote participation by adapting tasks to child’s skill level.

- Developmental Skills Supported:

• Fine Motor: In-hand manipulation.

• Cognitive: Sequencing.

• Social-Emotional: Supporting social interactions and enhancing participation in the ADL(shoe lacing).