WP3 - POWERPACK TOOLKIT ACTIVITIES

Social well-being: The Human Robot

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1. General Information

Well-being dimension: Social wellbeing (trust, clear communication, responsibility)
Target age group: 7-12 years (early to late primary)
Activity format: Peer-to-peer tutoring (Tutor/Programmer and Tutee/Robot roles)
Duration: 30-45 minutes
Group size: Small groups (pairs); adaptable to whole class
Transversal approach: Integrates math, vocabulary, digital literacy (algorithms), and ethics (responsibility for a peer's safety).

2. Learning Objectives

- Develop clear instructional skills and a sense of responsibility for a peer's safety.
- Practice active listening and building trust in a peer relationship.
- Engage in collaborative reflection and strategy adjustment based on shared mistakes.

3. Materials Needed

- Material 1: Blindfolds (or scarves) for half of the students.
- Material 2: Obstacles (cones, chairs, beanbags, or books).
- Material 3: "Target Zone" markers (hoops or tape on the floor).

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4. Activity Steps

Step 1: Introduction and Role Assignment (5-10 minutes)
Explain the concept of "coding" a human robot. Pair the students: one is the Programmer (Tutor) and the other is the Robot (Tutee). The Robot is blindfolded. The Programmer's goal is to lead the Robot to the Target Zone using only verbal instructions.

Step 2: The Navigation Challenge (20-25 minutes)
Game rules

- Attempt 1: Pairs navigate half the course. Stop immediately if an obstacle is touched.
- Debug (Reflection): Pause to discuss confusing words, timing, and safety needs.
- Iterate: Agree on one strategy change (e.g., using specific step counts) and try again.

Important: Reward patience and adapted communication, not speed or finishing first.

Step 3: Sharing the Learning (5-10 minutes) Groups share their refined strategies. The "Tutors" explain: "I realized I had to speak slower because my partner needed more time to process the direction."
Classroom Display (optional): Create a "Helper's Vocabulary" wall featuring the most effective guiding words discovered during the activity.

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5. Teacher Notes & Tips

- Safety First: Ensure the space is completely clear of dangerous items. If the classroom is too cluttered, use a hallway or gym.
- The "Stop" Rule: Establish a universal "Emergency Stop" command. If anyone (teacher or student) yells "STOP," all Robots must freeze immediately.
- Focus on Process, Not Speed: Watch out for pairs who try to run or rush. Remind them that in this game, "Fast is slow, and smooth is fast." If they rush and crash, they lose trust.
- Modeling Vulnerability: If students are hesitant, demonstrate the activity yourself with a student "Programmer" to show that it is safe to trust them.

6. Reflection prompt for students

After the activity, sit in a circle and ask:

- For the Robots: How did you feel when you couldn't see? Did you feel safe? Why or why not?
- For the Programmers: How did you feel to be responsible for someone else's safety?
- On Communication: What happened when you gave an uunclear instruction? How did you fix it (debug it)?
- On Trust: "What is one thing your partner did that made you trust them more?

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7. Tips for adaptation for children with special needs

Easier Version (Early Primary / extra support):

- Open Eyes Practice: Allow "Robots" to keep their eyes open for the first round to practice Left/Right differentiation.
- Simplified Course: Use a straight path with only 1-2 large, soft obstacles.
- Teacher Led: The teacher acts as the "Programmer" for the whole group first to model the correct vocabulary and safety.

Medium Version (Medium Primary / more independence):

- Complex Navigation: Introduce turns, curves, and "gates" (walking between two cones).
- Secret Codes: Challenge pairs to invent their own unique instructions or sounds (e.g., a clap = stop) to deepen their collaboration.
- Written Reflection: Have students document their "code updates" on paper between attempts.

Adaptations for Students with Special Needs:

- Sensory Anxiety: Use the "Visor Method" (holding a folder under the chin) instead of a blindfold to block the view of the floor without causing fear of the dark.
- Mobility Challenges: Create extra-wide lanes (1.5m) and use textured mats on the floor instead of physical obstacles for students in wheelchairs.
- Non-Verbal Communication: Replace speech with "Haptic Coding" (touch signals on the shoulder) or use pre-recorded sound buttons for commands.

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8. References (methodological approach)

- Computational Thinking: Algorithms and debugging taught through physical, unplugged activities.
- Social-Emotional Learning: Develops communication, trust, and responsible decision-making.
- Constructivist Pedagogy: Peer scaffolding within the Zone of Proximal Development.
- Embodied Cognition: Learning reinforced through physical experience and movement.

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