



Robotics in Preschool Education

Links to the Preschool Education Programme

The links are presented in relation with the learning activities done in class and are presented in the order suggested for their implementation

Learning Activity: Robots in our environment

Competency 5: to construct his/her understanding of the world

Key feature of the competency	To show interest and curiosity
Manifestation	To make connections with his/her everyday life.
Key feature of the Competency	To organize information.
Manifestation	To express what he/she knows. To seek, select and exchange information.

Learning Activity: Reading plans

Learnings Related to Language Development

Actions associated with emergent writing:	Imitation of reading behaviour (e.g. holding a book right side up, moving from left to right); Recognition of writing in the environment
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Learning Activity: Sorting pieces

Essential Knowledge

Cognitive and Metacognitive Strategies	<ul style="list-style-type: none"> - Observing - Exploring - Classifying - Organizing
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Learnings Related to Cognitive Development

Mathematics	<ul style="list-style-type: none"> - counting games (e.g. counting the number of pieces) - association and comparison games (e.g. -comparing the length of two objects) - grouping and sorting games (e.g. sorting objects by colour or size) - estimation games (e.g. estimating length, quantity) - measurement games (e.g. measuring objects)
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Learning Activity: Learning the robotics vocabulary and communicating with others

Competency 4: To communicate using the resources of language

Key feature of the competency	To produce a message.
Manifestation	To organize his/her ideas. To use appropriate vocabulary. To use information and communications technologies.
Key feature of the Competency	To understand a message.
Manifestation	To pay attention to the message.

Learning Activity: Building the model**Competency 1: To perform sensorimotor actions effectively in different contexts**

Key feature of the competency	To broaden his/her repertoire of actions.
Manifestation	To experiment with gross and fine motor movements.
Key feature of the Competency	To adjust his/her actions to the demands of the environment.
Manifestation	To situate himself/herself in the physical environment and experiment with sequences of actions. To use tools and materials for an explicit purpose.

Learning Activity: Building the model as part of a group**Competency 3: To interact harmoniously with others**

Key feature of the competency	To cooperate with others.
Manifestation	To share play, materials, ideas and strategies. To offer help and encourage others. To cooperate in activities and projects.
Key feature of the Competency	To show interest in others.
Manifestation	To become acquainted with different people.
Key feature of the competency	To apply a conflict-resolution process.
Manifestation	To recognize situations of conflict. To state the facts. To seek a solution and apply the solution chosen.

Competency 2: To affirm his/her personality

Key feature of the competency	To share his/her tastes, interests, feelings and emotions.
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Manifestation	To express in a variety of ways his/her tastes, interests, feelings and emotions.
Key feature of the Competency	To develop self-confidence.
Manifestation	To become aware of his/her strengths and limits. To put forward his/her ideas.

Learning Activity: Tackle a variety of challenges

Strategies

Emotional and social strategies	<ul style="list-style-type: none"> - Controlling his/her impulses - Paying attention - Managing stress - Maintaining concentration - Finding ways to overcome difficulties and resolve conflicts
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Learning Activity: Overall view

Competency 6: To complete an activity or project

Key features of the Competency	<p>To become involved in the project or activity, drawing on his/her resources.</p> <p>To show tenacity in carrying out the project or activity.</p> <p>To transmit the results of the project.</p> <p>To show satisfaction with the project or activity.</p>
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