

Teacher Education Design Principle + code:	7. Teacher education should familiarise teachers with a range of formal and informal inquiry- and creativity-based learning, teaching and assessment approaches and strategies and their use in relation to authentic problems within the areas of science and mathematics. TE: CreatInqPed
Specific Teacher Outcome(s):	7.3 Teachers should be able to recognize and exploit the value of play and exploration in science and mathematics for fostering and extending inquiry and creativity, by for example prompting questions, eliciting ideas, providing opportunities for consideration of alternative strategies during children’s familiarisation with phenomena and events. 7.4 Teacher should be able both to build in new and to make the most of existing opportunities for child-initiated play, recognising and capitalising on the potential of children’s explorations beyond the teacher’s original intentions. 7.5 Teachers should be able to use a range of creative contexts and approaches for provoking children’s interest, motivation and enjoyment in science and mathematics, such as stories, poems, songs, drama, puppets, games. 7.6 Teachers should be able to use strategies for making and building on science and mathematics real life connections and applications for engaging creatively young children in science and mathematics learning.
Factors linked with:	P: Play; P: Quest; P: Scaff; P: Affect
Type of material (image – interview (int) – classroom extract (class):	Classroom
Originating from:	
Country report :	D4.3 Greece
Case:	Case 6
Episode:	1 – Pansies
Teacher:	Katia
Age Group:	4-5
Selected episode present in D4.4 Appendix	No

Teacher supports children's engagement in exploring within a creative context to provoke children's interest, motivation and

The particular topic chosen by the teacher as the context of this activity was plant growth and it focuses on day one of the two-day lesson that involved the experiment with the pansies. During the first day, children would make predictions about the growth of the pansies and make an 'observation folder' to record their predictions and observations. On the second day, 5 days later, the children would observe the pansies and record their findings in regard to teacher growth and come to conclusions on the influence of each of the factors.

The lesson began with Katia asking the children if they remembered Mr. Planty, an agriculturist who loves all plants. In the story Mr. Planty had to leave his greenhouse to tend to a lettuce garden that was threatened by snails. That meant that he was forced to leave his 5 newly planted pansies to be tended by his five assistants. Each of the five assistants chose to keep his/her pansy during Mr. Planty's absence. Katia then explained how each assistant tended to the pansies.

What did each assistant do?

- Assistant 1: put the pansy in a box
- Assistant 2: covered the pansy with a plastic bag
- Assistant 3: stored the pansy in the refrigerator
- Assistant 4: placed it right next to the other flowers on the greenhouse
- Assistant 5: similarly placed the pansy in the greenhouse but forgot to water it

As Katia was telling the children what the different assistants did, the children were yelling out their comments and objections.

Katia: I want you to imagine, if the assistant placed the pansy in a box what might happen to the pansy during the next few days?

O: It will wither *[two more children agree]*

J: It will get hot

Katia: I am writing everything down in your observation notebook. Does anyone else from this team have anything to add? An, what do you think?

An: It will wither.

V: but they *[the assistants]* watered it every day. All except this one *[shows the 5th pansy]*

Katia: I agree, but is water the only thing a plant needs?

All: No

O, V, J: the sun

F: and food

Katia: So it needs the sun and food. What is the food for plants?

F: fertiliser

Katia: What is fertiliser? Is it liquid?

F: No it's something soft.

Katia: Like what?

F: Like dirt

Katia: and it contains nutritional elements right?

F: Yes to feed the plant

Katia: What else does a plant need?

O: Soil

Al: Rain. And water without the rain

creative little SCIENTISTS

Katia: That's right. If the weather does not rain for a while we need to water the plant ourselves. What if now we placed the plant inside the box, what will be missing?

All: The sun

Katia: OK so what symbol would you use to describe your team then? Do you think that it should be the sun?

All: Yes

Katia: One of you should come here and draw the sun on your observation notebook.

An: I can use the orange marker as well

Katia: Yes you can

An: Sometimes the sun is orange so I can use this one.

Katia: That is right

O: there is also a red sun

Katia: Yes

O: When it rises in the morning

Katia: Very nice. Now do you want to write all your names on the observation notebook?



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