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Second-Graders Beautify for Butterflies

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Abstract

This project presents activities that support previous research suggesting the integration of art with science is beneficial to the learning and cooperative processes of children. The project showcased here highlights the ability of elementary school children to collaborate with their peers for problem solving and critical thinking through the artistic use of observation and sketching. This project discusses effective lesson activities in which students combined art and science by creating and cultivating a butterfly garden on the school's property.

Background

Creativity Supported through Arts Integration

- The approach of integrating creative arts encourages learning from an intrinsic perspective allowing feelings and personal interpretation to guide the learning process.
- Students may engage in creativity as they are encouraged to discuss their ideas with one another through cooperative learning.

Benefits of Visual Communication Arts

- Arts integration can be a resource for youth to express their ideas through visual works, such as drawing and sketching, as another form of learning and communicating.
- By engaging in arts-integrated science, students practice science observations skills as they sketch or draw; these activities also improve their fine motor and spatial skills.

Figure 1. Student-decorated cement paver with ideas reflecting student learning.

Method

23 second grade students: 14 boys and 9 girls.

1) The first part of the project focused on the creation of the butterfly garden.
2) The second part of the project focused on the artistic creation of cement pavers to place within the garden.

The Lesson

Second-graders participated in a community engagement project during which they:

- brainstormed,
- collaboratively problem solved,
- and implemented a new plan to beautify an unsightly outdoor space at their school.

Figure 2. Pavers in place in the butterfly garden.

Motivation to help the Environment

- Through the course of the project, students expressed a desire to participate in making their school garden beautiful as they learned about the importance of butterflies in the environment.
- Students voiced a desire to assume responsibility for their environment (their school garden) by providing a safe sanctuary for pollinators.
- Lastly, students communicated their joy and motivation at being able to play in the garden and get their hands dirty!

Implications

- The results of this project support teachers integrating drawing into their curriculum as an aid for children to expand their communication skills.
- Following opportunities to share knowledge, students expanded upon their ideas and expressed them creatively through drawing on concrete paver blocks.
- Participation in this project provided students with an opportunity to collaborate with peers in a joint effort to plan a beautiful garden.

Figure 3. Completed paving stones made by students.

Conclusion

Through the act of improving a public space at their school, students engaged in a collaborative, proactive approach to science and art. The students' participation in the butterfly garden opened a dialogue amongst the students regarding their self-awareness of their role in the environment.

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