Cultivating collaboration when designing a kindergarten playground with the children: A Project Based Learning Approach

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Background

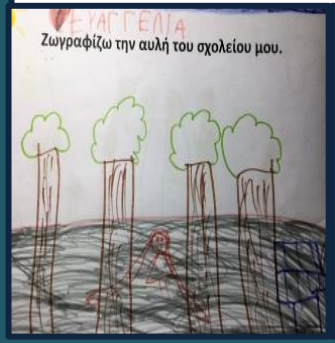
Outdoor play promotes children's fitness and health, reduces stress, develops motor skills, relaxes the mind and enhances friendship and good relationships among students. "Perhaps, above all, play is a simple joy that is a cherished part of childhood". (Ginsburg182). Unfortunately in Greece, due to lack of space, financial problems, lack of collaboration between stakeholders, the school principal and the public services, kindergarten playgrounds are completely inappropriate for young students.
The purpose of this study is to prove that when stakeholders, teachers and students collaborate the result is in favor of students who are involved in something useful for themselves.

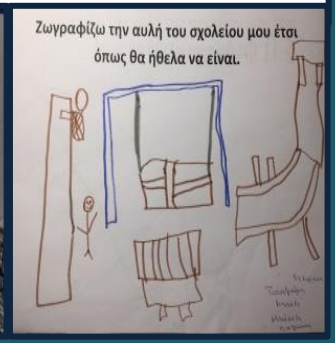
Driving Question

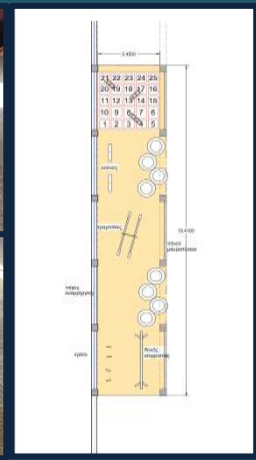
Does collaborative designing of the school yard leads to children's full engagement in the process?

Methodology and Procedure for the first group

Behavioral Approach: the teacher asks students , each one to sketch his school playground as it is and as he would like this to become .
Group of children: 10 students , 1 teacher, 1 pre-service teacher, stakeholders.
The teacher informs students that they will sketch their school yard after showing them photos of schoolyards and reads them a story Students were given two white sketch papers where in the first they should sketch their school yard as it is and in the second their schoolyard as they would like it to be. Children did not collaborate either with peers or with teacher and stakeholders.
Timeline: work, research and design lasted two weeks (2 days each week, one hour per day)







Methodology and procedure for the second group

Constructivist approach : Learning occurs as learners are actively involved in a process of meaning and knowledge construction.
Project Based Learning Approach. (Kolmos,A p.6-7)
Topic: Design and Architecture.
Collaborative parts: 10 Students,2 teachers, stakeholders.
The teacher asked students to form 2 teams of 5 students each and working collaboratively, each team with classroom materials to sketch and design their school playground. Students first discussed, then sketched and finally working collaboratively designed with classroom materials the playground.
Aims :

- To develop students creative thinking
- To enhance collaboration
- To engage in a demanding task
- To feel successful and elevate their self-esteem
- To do something useful for themselves.

Timeline: work, research and design lasted one month (two days each week, one hour per day).

Procedure for both groups

Both groups went out in the schoolyard and started measuring with various ways (traditional meter, foot steps, rods etc.).
The final product was presented to a mother who is an Architect and she designed the final floor plan in collaboration with the students.
Finally the project was presented to the local authorities for materialization.

Conclusions- implications for future collaborations

Students who worked independently and only sketched the playground without further involvement showed low or no interest in participating to the procedure of measuring and of collaborating with the Architect. Instead, students who applied PBL approach showed big interest in the procedure as they considered it as part of their own work, understood better the whole procedure, collaborated successfully and applied what they have learned to real life with enthusiasm.
As a result we conclude that students collaboration with peers, teachers and stakeholders fully engages them in the process, develops their creativity , elevates their self esteem and enables them to develop 21st century skills such as the problem solving and the critical thinking.
Implications for future collaborations: Our Goal is to help students collaborate in all fields of the curriculum with peers, teachers and stakeholders as well as with schools and students all over the world.

References

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