LEGO Education Preschool products

Need Statement

The issue in my early learning classroom is (select an area of issue below or create your own).

Issue 1: students are not engaged in learning.

Issue 2: students with an extreme diversity of abilities.

Issue 3: students need better opportunities to enhance speaking or listening skills.

Issue 4: students need to work effectively in teams.

Issue 5: a lack of hands-on exploration of early numeracy or literacy.

Issue 6: incorporating more creative or project-based learning opportunities.

Issue 7: creating a play-based environment that involves experimentation.

Project Description

My solution is to utilize LEGO® Education Preschool products in the classroom to engage every student and create a hands-on learning environment that promotes school readiness.

LEGO Education products are based on "constructivism." This educational theory states that children learn best when they experience things firsthand and within a meaningful context.

The curriculum, which is aligned to national standards, engages students to become more independent learners. The 21st-century skills they will develop include collaboration, communication, creativity, critical thinking, and problem solving.

It creates a learning environment that fosters early understandings of reading, writing, mathematics, science, listening, and speaking.

Students demonstrate an increased ability to **(Add goals you want students to achieve using this program.).**

Skills assessment will take place through student presentations, ongoing observation, and written work.

Curriculum Information

(Select relevant description options. Be sure to include information on the area of issue. Add additional statements to show how you will address the area of issue using the product(s) you select.)

LEGO education

Option 1: Build! Explore! Learn! Preschool Activity Pack and XL Brick Set

Preschool students build environments and models that develop school-readiness skills and spatial-recognition skills.

- Inspire creativity.
- Promote discussion and expressive language.
- Support collaboration and teamwork skills.
- Learn how to use fantasy and imagination.

As they create together, students cover curriculum areas such as language arts, mathematics, science, social and emotional development, and social studies.

The activity pack includes:

- 80 activities based on 16 common preschool themes.
- 40+ hours of instruction for hands-on learning.
- Customizable and reproducible templates for planning, documentation, and assessment.
- Teacher's notes, sample builds, vocabulary, and extension ideas for expanding learning opportunities.
- Learning grids mapping all activities to key standards.

The I-cap set comes with 562 DUPLO® elements, including many special elements for student creations.

Option 2: Tubes Experiment Set

Provide an interactive way for students to discover how things work in the world around them.

- Explore dimensions and shapes
- Experiment with cause and effect
- Ask "what if I," "how do I," and "I wonder if" questions
- Strengthen questioning and critical-thinking skills
- 147 DUPLO elements

Option 3: Animal Bingo

Present new challenges based on a classic game by having students collect bricks that match their building cards and construct their animals.

- Build models
- Recognize and match shapes and colors
- Build collaboration skills
- Learn the rules of playing games with others as a team
- 49 DUPLO elements

Option 4: Creative Builder Set

Explore shapes, space, position, numeracy, and storytelling in a fun, hands-on way.

- Develop an understanding of 2-D and 3-D shapes
- Work on descriptive language skills through collaborative storytelling
- Gain a better understanding of community and the larger world
- 124 DUPLO elements
- 2 students per set

Includes getting-started materials, four double-sided activity cards, and a sturdy plastic storage bin

Option 5: Math Train

Explore math in an imaginative way. Students work intuitively with early math skills to learn about numeracy and quantities while playing different roles around a railway.

- 124 DUPLO elements
- 3 double-sided activity cards to stimulate students' thinking to solve basic problems to build their critical thinking in math

Option 6: StoryTales

Develop a strong foundation for primary students in literacy and comprehension. Students build basic skills in storytelling through a rich environment including a range of characters, settings, and plots to unfold as they create and retell stories.

- Themed around the Three Billy Goats Gruff fairy tale
- 109 DUPLO elements
- 3 baseplates with five double-sided story starter backdrops

Option 7: Playground Set

Introduce mathematics and language as students explore people, communities, social roles, feelings, and behaviors in the popular and universal playground setting. The set encourages creative play, imaginative storytelling, and the use of language related to shape, color, and position to build foundational concepts for students in the core curriculum.

- 104 DUPLO elements
- Includes getting-started materials, two activity cards, and a sturdy plastic storage bin

Option 8: Early Structures Set

Expose students to STEM basics by investigating concepts of balance, strength, and stability when building solid structures such as towers, bridges, and walls. The set challenges students to solve problems while practicing collaboration and experimenting with various designs to develop early engineering skills.

- 107 DUPLO elements
- 1 set per two to three students
- Includes teacher notes with support for 16 activities, 14 investigation and problem-solving cards, an inventory list, and a sturdy plastic storage box
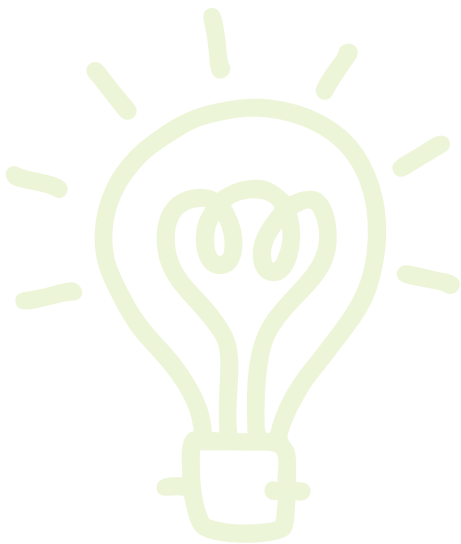
Option 9: Café+ Set

Explore numbers, shapes, and colors while learning about trade, money, and social roles. First-grade students work cooperatively while role-playing as customers, chefs, and servers at the café to learn job-related skills. As the orders come in, students interact with numbers in several ways through counting, adding, and subtracting.

- 131 DUPLO elements
- 1 set per minimum four students
- Includes activity ideas, menu cards, and a sturdy plastic storage box

Option 10: Tech Machines Set

Use tools in a safe way while taking their first steps into science and technology by learning about machines and their functions.

- Investigate career skills
- Communicate and collaborate to solve problems
- 95 DUPLO elements include screwdrivers, integrated screws, reels, hooks, scoops, and propellers.
- Activity pack with story starters, problem-solving tasks, and full-color inspiration cards
- Includes sturdy plastic storage box

LEGO education

Professional Development

This hands-on workshop features intense communication, reflection, and application that helps teachers create a safe environment for all students to share their ideas.

The workshop lets participants experience being both a student and a teacher as they learn how to apply the concepts behind LEGO Early Education Learning products in their classrooms, as well as to meet NAEYC and/or Head Start standards.

Participating in the workshop leads to a greater understanding of when and how to use LEGO to get 100 percent of students participating and communicating effectively.

Learning theory

- Apply the 4Cs in the classroom.
- Awaken students' interest in given subjects.

Hands-on

- Build machines and see how they can teach specific concepts to gain confidence in the classroom.
- Discover how to use LEGO Education products beyond free play.
- Learn how to begin and how to take a simple concept and make it complex through a series of intermediate steps.

Tools for planning

- Explore ways to apply LEGO Education Preschool Learning products and lessons to curricula.
- Share ideas with other participants and leverage best practices to get the most from professional development.

Materials management

- Organize and label the materials and do periodic inventory.
- Keep the sets organized and ready for student use.

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