

# StoryStarter

Use the following information when requesting grants for manipulatives used to teach language arts skills for Grades 2-5.

## Need Statement

The issue in my elementary classroom is **(select an area of issue below)**.

**Issue 1:** students have low reading comprehension.

**Issue 2:** students are struggling to produce writing.

**Issue 3:** students are not engaged in learning.

**Issue 4:** getting all students to participate.

**Issue 5:** students with an extreme diversity of abilities.



## Project Description:

My solution is to utilize LEGO® Education StoryStarter in the classroom to engage every student in a cross-curricular, hands-on learning environment.

StoryStarter is 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 growth in reading, writing, listening, and speaking and addresses the challenges associated with **(area of issue)**.

Through this program, **(number)** students will create models that represent the beginning, middle, and end of a story or relevant parts of something they have read or researched.

- Compare and contrast stories and characters.
- Explain the importance of setting.
- Determine alternate endings based on readings.
- Portray the points of view of various characters.
- Explain the most important ideas found in research.



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Using StoryVisualizer, students will publish their stories or reports, putting together text and graphic illustrations. Their finished work can be printed, emailed, or placed on a webpage.

Students demonstrate an increased ability to comprehend what they have read, communicate more effectively, and write their own creative stories or research-based reports. Students' skills will be assessed throughout the project through ongoing observation, presentations, and written work.

**(Add current figures from scores and the percentage increase you wish to achieve from using this program.)**

Students will accomplish their goals by engaging the StoryStarter curriculum, which includes (number) hours of classroom instruction involving open-ended problem-solving activities that engage students. This curriculum features StoryVisualizer, which enables students to publish their stories, write research reports, and document their ideas.

**(Add information on the standards and types of lessons you will utilize in this program to achieve the growth indicated above.)**

## 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 StoryStarter.)**

### Option 1: StoryStarter Core Set

Designed for Grades 2 through 5, LEGO Education StoryStarter is a hands-on learning tool that enhances students' reading, writing, speaking, and listening skills.

- 1 set per three students
- 1,147 elements, including baseplates, activity spinners, organizational stickers, specialty bricks, and minifigures
- Storage bin with sorting trays

### Option 2: StoryStarter Curriculum Pack & StoryVisualizer Software

Create more engaging language arts lessons focused on enhancing students' reading, writing, speaking, and listening skills. When combined with the StoryStarter Core Set and downloadable StoryVisualizer software, the curriculum pack makes it easy to develop rich language arts lessons that inspire teamwork, critical thinking, and creativity.

The curriculum Pack includes:

- 24 project-based language arts activities correlated to Common Core Standards.
- A learning grid aligning activities to key standards and objectives.
- Rubrics for ongoing student self-evaluation.
- An element survey, lesson plans, student worksheets, and tips and tricks.

StoryVisualizer enables students to document and present their stories. Using a webcam, digital camera, or smart device, students take images of their storiescreations and import them into the software or application. The program enables users to select from a variety of preexisting writing templates or to customize their own.

StoryVisualizer includes:

- Site license
- Downloadable software
- Downloading tablet application (iOS and Android)

Laptop and tablet not included.



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## Professional Development

This hands-on workshop features intense creativity, communication, reflection, and application that help 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 StoryStarter in their classrooms.

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

## Learning theory

- Discover a process of reflection and dialogue to cultivate a positive learning environment and achieve learning targets across the board.
- Awaken students' interests in given subjects.

## Hands on

- Build metaphors and share insights and experiences.
- Experience using StoryVisualizer to produce and publish finished stories, papers, and reports.
- Learn how to print or email students' work or create ideas as story starters.

## Tools for planning

- Explore ways to apply the method to curricula.
- Practice planning StoryStarter sessions.
- Write challenges and determine follow-up activities.

## Materials management

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

## E-Learning: Getting Started with StoryStarter

This online E-Learning program for LEGO Education StoryStarter consists of lessons and software tutorials presented in full HD video and led by a LEGO Education Master Trainer and Content Developer.

- 8 five minute video lessons
- 5 software tutorials
- 3 course levels, from complete beginner to confident user.
- A series of questions help participants reflect on the information covered and further strengthen the learning process.
- Built-in progress tracking makes it easy to pick up where training was left.
- Participants obtain the official Certificate of Completion upon successfully completing the Certificate quiz.



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# Curriculum Information

Select relevant description option:

## Option 1: EV3 Design Engineering Projects

EV3 Design Engineering Projects is a curriculum package with 30 hours of classroom instruction. The curriculum features three main sections: Make It Move, Make It Smarter, and Make a System. Each section includes five design projects.

## Option 2: EV3 Space Activity Pack and Challenge Set

The EV3 Space Challenge Set includes three 2' x 3' learning mats, one 4' x 6' challenge mat, and a large number of LEGO elements for building the challenge models. When the challenge set is combined with the EV3 Space Activity Pack, you can teach 30+ hours of activities in the following categories: Basics of Gears, Learning Missions, Challenge Missions, and Research Projects.

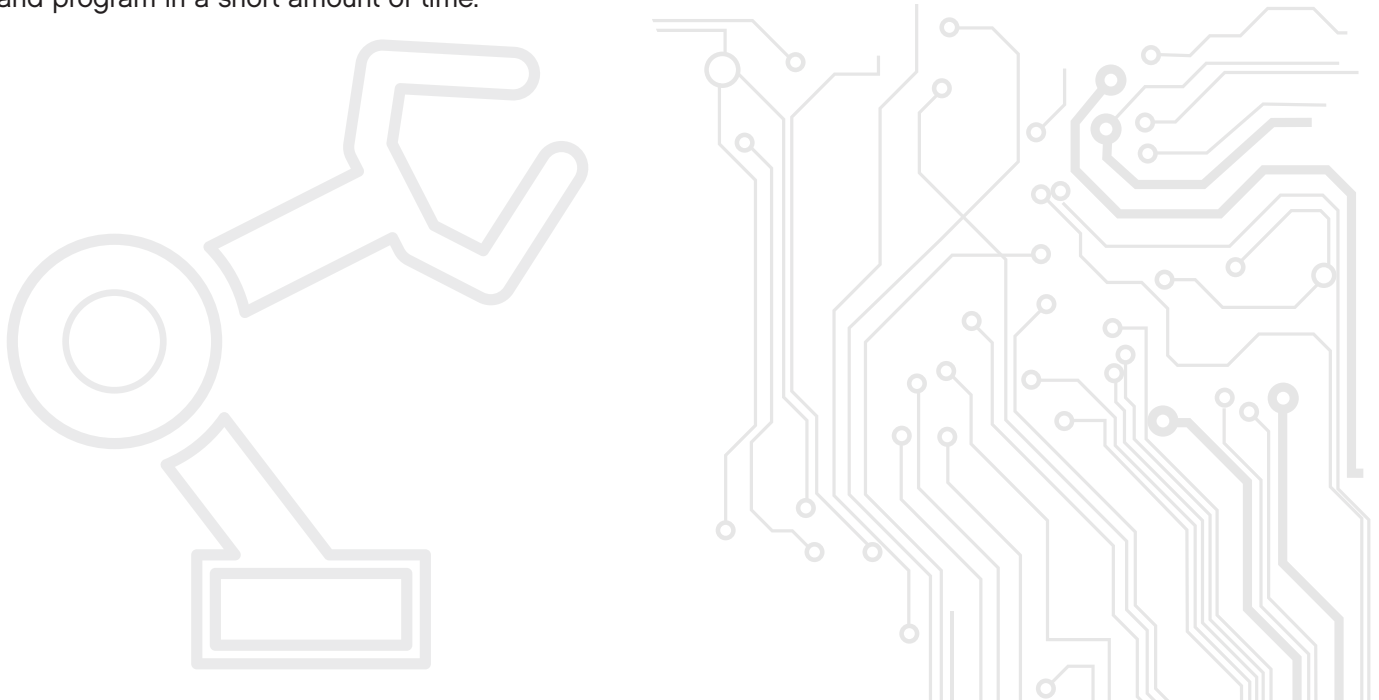
## Option 3: EV3 Science Activity Pack

The EV3 Science Activity Pack is the result of a close collaboration with science teachers and Fraunhofer, a global application-oriented research organization. It consists of 14 physical science experiments that utilize the data-logging capabilities of the LEGO MINDSTORMS Education EV3 hardware and software, as well as the LEGO Education Renewable Energy Set and the MINDSTORMS Temperature Sensor (each sold separately).

The experiments focus on:

- renewable energy (energy production and consumption)
- thermal physics (boiling/melting points and heat transmission)
- mechanics (force and motion)
- light (light intensity)

Each experiment fits within a 45- to 90-minute science lesson with small, engaging LEGO models that students can build and program in a short amount of time.



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## Professional Development

This hands-on workshop is six hours of intense communication, reflection, and application that is tailored to meet the needs of the participants.

The workshop lets participants experience being both a student and a teacher as they learn about EV3 programming, discover how STEM fits the curriculum and subject area they teach, and practice differentiated instruction.

Participating in the workshop leads to a greater understanding of how LEGO Education creates an environment where all students can share their ideas and knowledge. It also provides the tools necessary to engage students throughout the year by connecting the possibilities of EV3 with the required curriculum.

## Learning theory

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

## Hands on

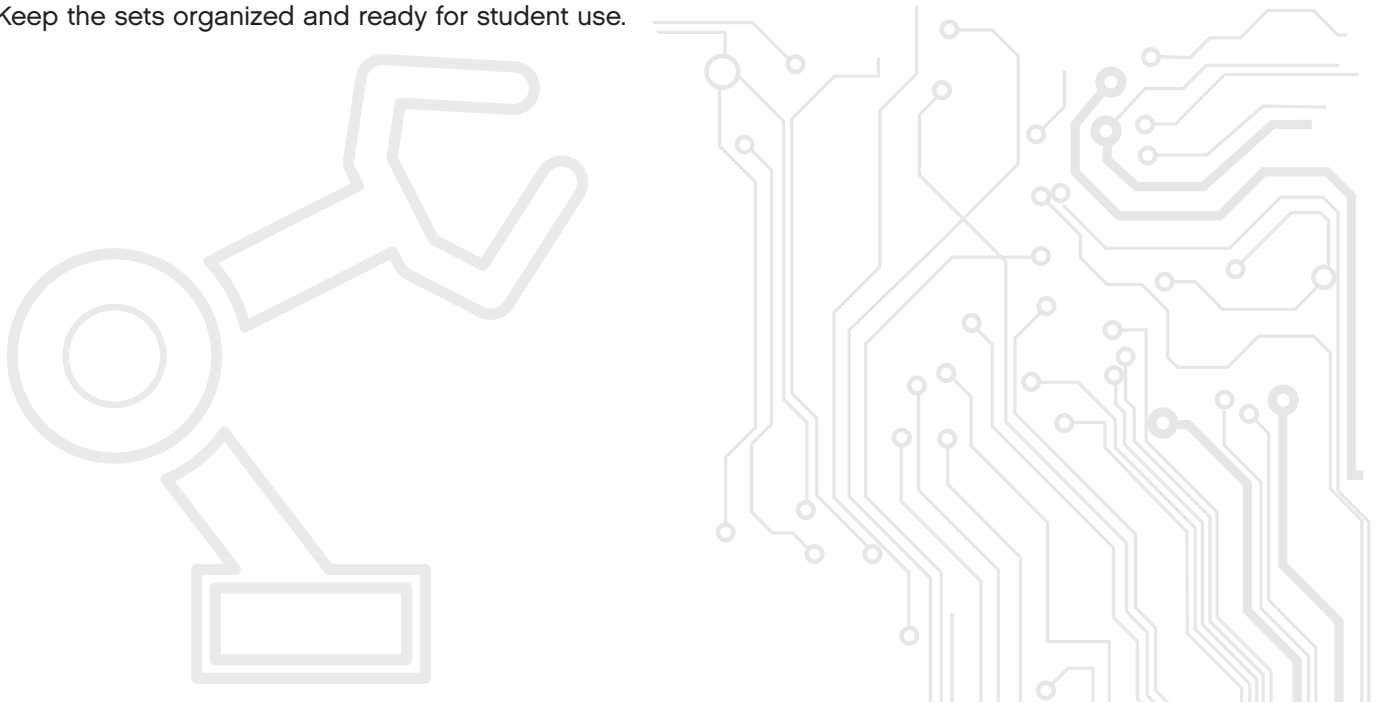
- Learn how to get started and how to take a simple concept and make it complex through a series of intermediate steps.
- Develop confidence in leading students through building and programming a robot.

## Tools for planning

- Apply EV3 to curricula programs.
- Share ideas with other participants and leverage the knowledge of best practices from the facilitator 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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## Justification Letter

Dear School Administration,

I am writing to inform you about LEGO® Education \_\_\_\_\_, a unique and cross curricular tool I feel will be a valuable addition to my classroom.

This solution is based on the educational theory of constructionism, which is rooted in the belief that children learn best when they experience things firsthand and within a meaningful context. I truly believe that this hands-on experimentation with concrete materials will lead to deeper engagement and development of skills of the 21st century: collaboration, communication, creativity, critical thinking, and problem solving.

Perhaps the best news is that the cost of an entire classroom implementation of LEGO Education \_\_\_\_\_ is affordable, so we could finance it with a reasonable budget.

I would like to quickly review the benefits of integrating this solution:

- Directly addresses several areas of our curriculum
- Constructionist approach to learning, resulting in higher student engagement and memorable experiences
- Supports fundamental skills of the 21st century
- Very affordable (doesn't compete with books or other materials)
- Reputable company in education for more than 30 years
- Materials are not consumable and last for years

I truly hope you are as excited about this idea as I am, and I look forward to hearing your thoughts and fielding any questions you might have.

Thank you for your time.