

"What Happened To The Future?"

We wanted Flying cars, instead we got 140 characters. - Peter Theil

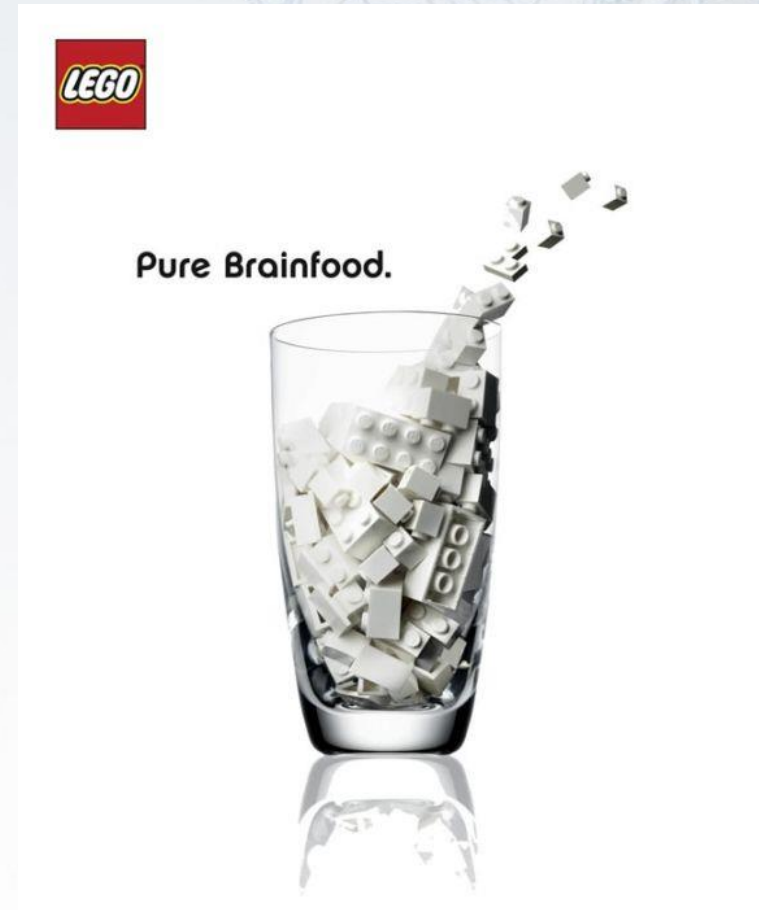
How do we foster creation, creativity, and innovation across the curriculum?

Open the StoryStarter App called StoryVisualizer

Login Code: w147z1gsw8

We are all Creative

- We all have a capacity for Creativity
- Creativity is a habit of the Mind
 - We can practice creative thinking
 - Systematic Creativity
- Scientist must be just as creative as Artists. Plumbers, doctors, teachers, etc. The problems they face require creative solutions. They may use a different medium.
- Creativity is a major key to success for our 21st century students and our economy



Creative thinking ...

Will lead to problem – solving...

Will lead to innovation....

**We must make the effort to
practice, just as we would
practice for a sport.**

STEAM

STEAM is more than a lesson where you build something.....

STEAM is creative thinking....

Where students become creative thinkers..... and creators, developers, or producers of artifacts and ideas.....

This can be accomplished in science, math, reading, writing, and social studies.....

With LEGO® Education StoryStarter



What is StoryStarter?

Physical + Digital Platform for
Language Arts and all other
core curriculum areas

- Focused on
 - Speaking
 - Listening
 - Writing
 - Reading
- Practices 21st Century Skills
 - Creativity
 - Collaboration
 - Communication
 - Critical thinking



StoryStarter Core Set

- 1,144 elements delivered in a sturdy storage box
 - Assorted characters, animals, accessories, iconic elements and basic bricks. All elements x5.
 - 5 building plates for creating story structures
 - 1 building plate to build the spinner
- 2 spinner cards
 - Category, Setting, Time & Mood
- Sticker sheet for classroom management
 - Characters, Props, Setting, Details, Scenes
- Element overview



What makes this set different from a Retail set?

- Research Based Parts
 - School content themes and books
 - Metaphoric Value – parts that can be used to represent a lot of different things both literal and metaphorical.
 - Flexibility
 - Pre-Conceived Ideas and themes come in retail boxes and may limit creative thinking
 - We want to spark ideas with parts, not provide the story with a part.
- Quantity of parts allow for scenes and characters to remain constant through the 5 phases of the story arc.
- Parts in the kit = parts of a story. Setting, Main character, Supporting details, etc.
- If you don't have something you want, you can build it.



StoryStarter Curriculum Pack

Comprehensive material for the teacher including:

- Curriculum Grid
- Rubric Sample
- Description and Guide to StoryVisualizer Software
- 24 differentiated Lesson Ideas
 - Activities all explicit correlated to Common Core Standards
- Constructopedia
- Tips & Tricks
- FAQ



- All 24 activities have been correlated to the English Language Arts Common Core State Standards for grades 2-5. Each activity has been tied to the parent standards in the following areas :

- The curriculum pack contains four types of activities:

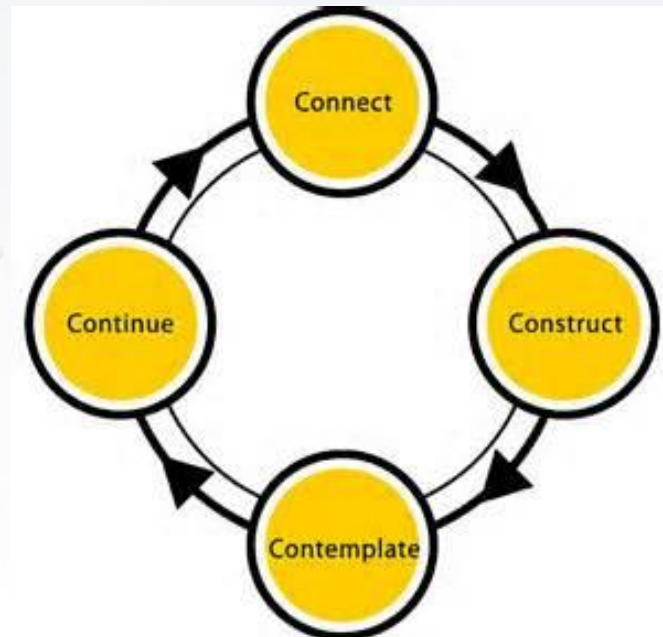


The LEGO Education 4C Learning Approach

Engineering Design Process



LEGO 4 C Lesson Format



LEGO Education 4 C Lesson Format

Connect

Presents an Open Ended Challenge
Creates Solution - Seekers

Construct

When learners construct artefacts in the world, they construct knowledge in their minds. With new knowledge learners build more sophisticated artefacts, yields yet more knowledge, in a self-reinforcing cycle.

Contemplate

Facilitated Reflection, Collaboration
Sharing Insights and Understandings
Analysis both Quantitative and Qualitative

Continue

Every task ends with a new task .
Building on what has been mastered
Leading to a new Connect Phase.

This allows learners to enter a positive learning spiral, in which they take on increasing difficult challenges...

StoryVisualizer Software

- Sold as a package deal with the curriculum pack
- Building license – no limit
- Cross platform compatibility
 - iPad
 - Android
 - Desktop PC
 - Desktop Mac



Examples from the Software

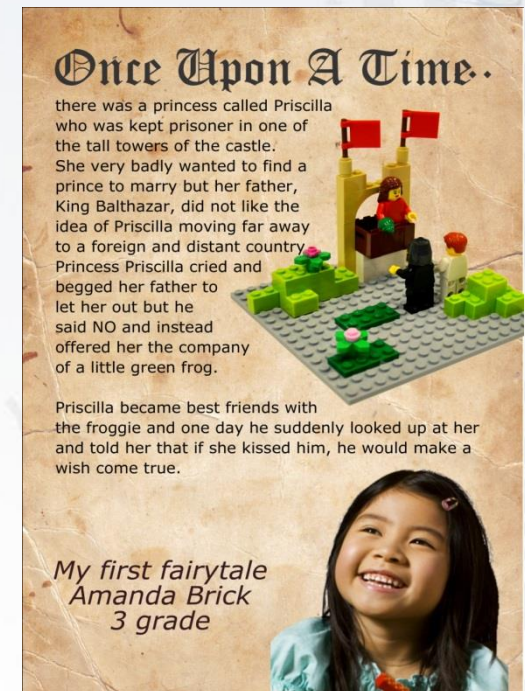
Comics



News



Fairy Tales

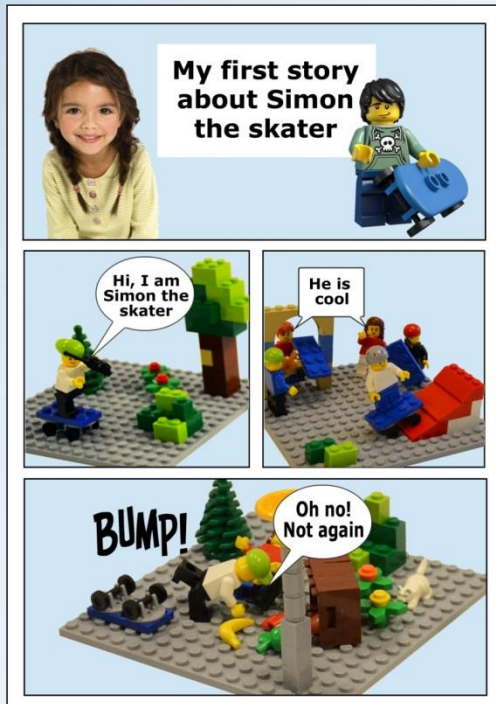


Why use StoryStarter

- Increase Student Motivation
- Increase Student Engagement
- Practice the 4 C's of 21st Century Learner: Critical Thinking, Collaboration, Communication, Creativity
- Cross Curricular Nature - students to create Mind Models within any curriculum area
- Engages all modalities of learning
- Integrates Digital Learning with Writing
- Accommodates a wide variety of students and learning levels from Gifted to RTI
- Enhances composition technique through visual-verbal connection
- Systematic Creativity: leads to self-directed learners actively pursuing learning – intrinsic motivation

Examples from the Software

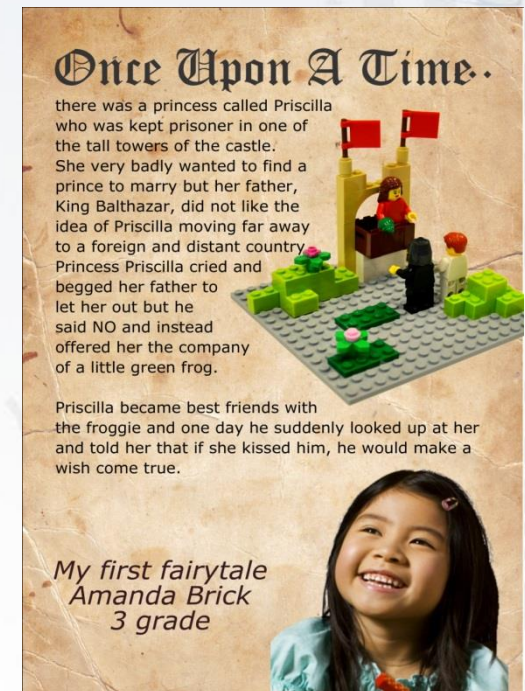
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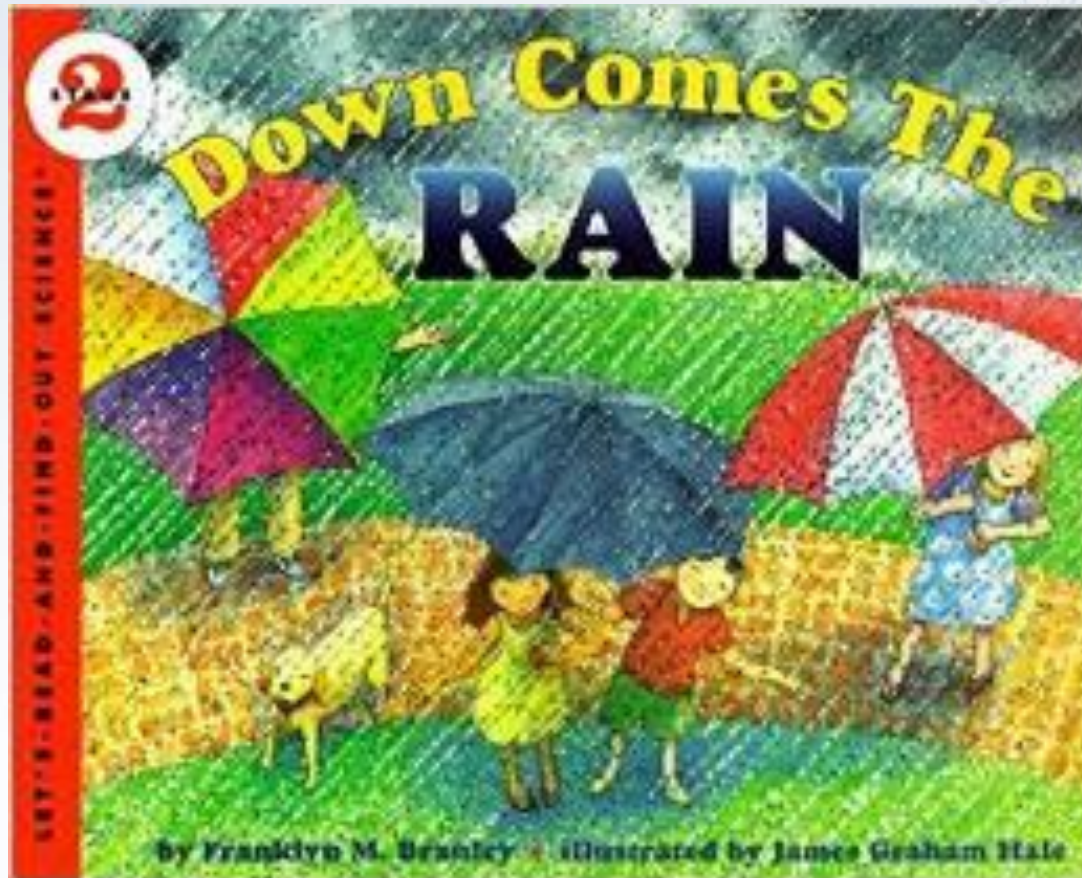
StoryStarter Rules and Management

1. Rule of Representation: If you say it is... it is...
2. If you don't have it, build it.
3. LEGO Down > LEGO Found.

Other management suggestions can be found on the weebly site:

<http://innovativelearningbrickbybrick.weebly.com/storystarter.html>

The Water Cycle



The Water Cycle

Where does the rain come from?

On your board build a model of where you think rain comes from. If you are not sure, just put one brick on your plate to get started.

Students go on to read about Water Vapor and Evaporation and the role of heat in this process. Liquid > Gas

What can you add to your model to describe what you have learned about how water gets into the air?

Students go on to read about Water Vapor and Condensation and the role of the absence of heat (lower temperatures) in this process. Gas > Liquid

What can you add to your model to describe what you have learned about how water vapor condenses to clouds and rain and falls to the earth?

Water Cycle – Bring Literacy into STEAM

In a pair you must build a story, beginning, middle and end that includes the following components...

- Three phases of the water cycle
- Include the new vocabulary terms: evaporation, condensation
- A cat
- A moral

Learning Objectives

- Sequence appropriately and tell story events
- Create logical sentences that have meaning
- Use characters, action, and narratives to convey a story, theme, and emotions
- Use vocabulary and syntax to communicate clearly and effectively
- Evaluate speech and reflect on how it varies
- Utilize technology as a tool for production, presentation, and distribution of written artifact.

Writing

Text Types and Purposes (W.CCR.3)

Production and Distribution of Writing (W.CCR.5; W.CCR.6)

Speaking and Listening

Comprehension & Collaboration (SL.CCR.1; SL.CCR.2)

Presentation of Knowledge and Ideas (SL.CCR.4; SL.CCR.5; SL.CCR.6)

Language

Conventions of Standard English – (L.CCR.1; L.CCR.2)

Vocabulary acquisition and Use (L.CCR.5)

How do I get started?



- **Decide on your main characters ...**

- Who are they
 - Cat
 - Spider
- What do they look like
- What is their name
- Where did they come from?

- **What is the setting and what parts might we need to convey this?**

- What is the problem of the characters?
- What does the setting look like?
- What might be scary in your story?

Start building and collaborating, the story will evolve...

Now you Fill in.....

3 Phases of a Story Arc

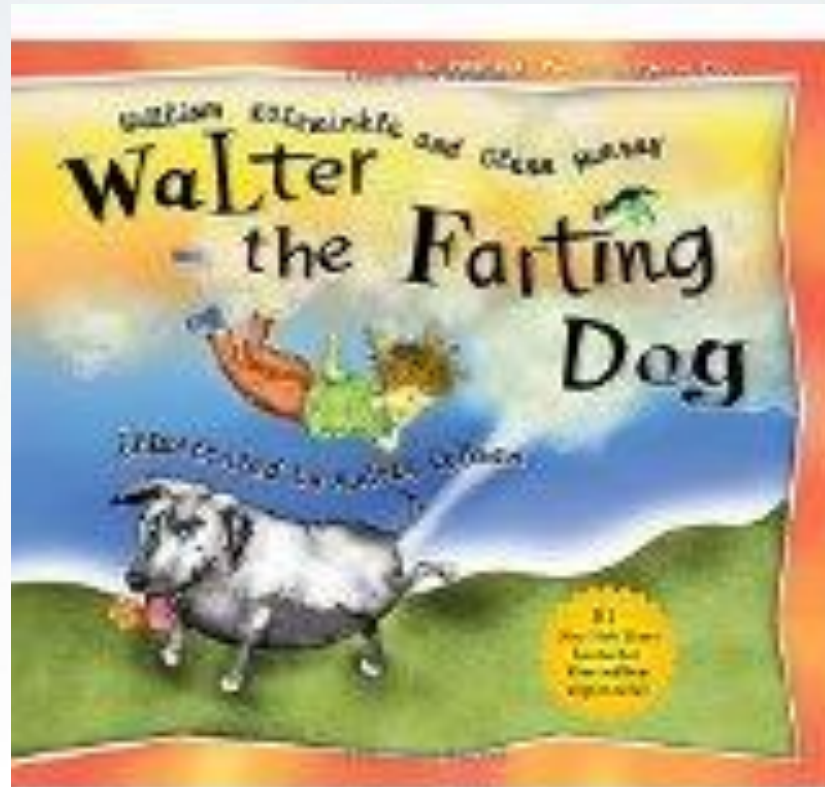
- Beginning
- Middle
- End

Can you answer these questions?

- What is your mission?
- Who are you there to help?
- When?
- Why is it important?
- Where?
- How did you make it better?



Bring STEAM into Literacy



Design a contraption for Walter to wake the family in case of another emergency.

Habitats

Research and design the new zoo exhibit for _____ at the Atlanta Zoo. Then write an article for the cover of the local newspaper telling everyone about it.

At least 1 base plate.

Research Biotic and Abiotic factors of your animal habitat that should be included for their survival, safety, & comfort.

Consider what visitors want/need.
Consider what the zoo keepers need.



Learning Objectives

- Analyze and evaluate animal habitats
- Analyze and evaluate animal needs and behaviors
- Use vocabulary and syntax to communicate clearly and effectively
- Evaluate speech and reflect on how it varies
- Utilize technology as a tool for production, presentation, and distribution of written artifact.

Writing - Text Types and Purposes W.CCR.3

Writing - Production and Distribution of Writing (W.CCR.5; W.CCR.6)

Speaking and Listening – Comprehension & Collaboration (SL.CCR.1; SL.CCR.2)

Speaking and Listening – Presentation of Knowledge and Ideas (SL.CCR.4; SL.CCR.5; SL.CCR.6)

Language – Conventions of Standard English – (L.CCR.1; L.CCR.2)

Language - Vocabulary acquisition and Use (L.CCR.5)

Ways to Use StoryStarter in the STEAM Classroom

PreAssessment

- Gather information about what the students already know. Ask an open ended question that has no right or wrong answer. Just a build challenge that will allow you to assess what the students already know.
- Build a model of what you think represents the word “Work”

Modeling as representations of informational text

- create a booklet of the positions of the Moon, Sun and Earth at the different seasons of the year.
- Lab Safety Rules

Creative Writing

- Build story as a group where the setting of the story includes the three phases of the water cycle, a _____ and a _____.
- Build a model of an environmental current event, blizzard, fire, build models to tell the story of your day living through this event and write about it for the local paper.
- Build a model of a scientist at work. Who What When Where Why and How. Interview your scientist for the local paper and write the article.

Visit this site for more great STEAM ideas!

- <http://innovativelearningbrickbybrick.weebly.com/storystarter.html>

How can I use StoryStarter in Language Arts

- As a supplement to any reading or writing program.
- As part of your “Daily 5” program
- As ELA Support via Instructional Technology Lab time.
- As a Literacy Solution for ANY core subject area



Ways to Use StoryStarter For Literacy Across the Curriculum

Whole Class

After reading a story or chapter, have students:

- Build models of a key event and retell.
- Build models that explain the situation the main character faces and the possible courses of action.
- Build models that show the progression of the story – sequencing beginning, middle, and end.
- Build models that show a scene from different characters' perspectives.
- Build models that help explain the meaning of vocabulary words.
- Build models that help explain the informational text of a subject area.
- Build models that help organize and summarize information found while doing research.
- Build models that show habitats, biomes, or settings.
- Build models of what they would advise the main character to do.

Group Brainstorm

- How do you see yourself using StoryStarter in your classroom?



Questions?

Please visit www.LEGOeducation.us/StoryStarter

to find:

- **Videos**
- **Recorded Webinars**
- **Case Studies and more!**



Student Reactions

Collaboration
Motivation
Confidence
Reflection
Creative Expression
FUN!

Why do we LOVE
StoryStarter?

My writing is better
because I have good
details. ~Brady

It helps us get ideas.
Looking at my model
helps me remember
things and my writing is
better when I use
bricks. ~Teran

It makes writing more
fun and you get more
ideas when you build!
~Allison

Allowing students to be creative
allows learning to be a “get to”
activity not a “have to”



Teacher Reactions

*I agree that my kids are **VERY motivated** on LEGO StoryStarter days. I feel that the speaking standards are being met over and over. WONDERFUL for my ELLS. I also feel that by using a text map, they have really gained an understanding of what makes a narrative."*

Jennifer Jaworski
Reading Interventionist
Shenk Elementary School
Madison WI

*Student engagement was higher and they were all able to equally participate in the activity. The biggest impact is that the students were **eager to write** their stories and they were **very proud of what they created.**"*

Ofelia Medina
2nd Grade Teacher
TIPS South Hill Academy
West Covina, CA

*"The biggest impact that StoryStarter has made on my classroom is that the students are now eagerly looking forward to writing. In fact, according to my students, writing has increased in **rank from 4th place to 1st place** on the students list of students' favorite subjects in school."*

Eric Slay
2nd Grade Teacher
Betsy Ross Elementary
Anaheim, CA

*"Since my students thought of it as fun, many of them didn't realize they were learning throughout the process. For students who do not usually think of themselves as good writers, StoryStarter acted as a **springboard into a part of themselves they didn't know was there.**"*

Mary Walser
3rd Grade Teacher
Fairview Elementary School
High Point, NC