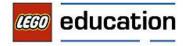
"What Happened To The Future?"

# 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



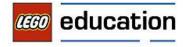
### We are all Creative

- 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 21<sup>st</sup> 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.

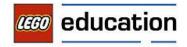


## **STEAM** STEAM is more than a lesson where you build something.....

**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....







### What is StoryStarter?

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

- Focused on
  - Speaking
  - Listening
  - Writing
  - Reading
- Practices 21<sup>st</sup> 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



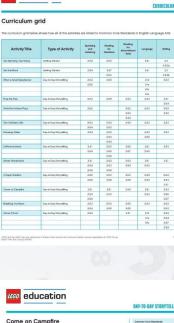




### **Curriculum Relevance**

- 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 :
  - Speaking and Listening
  - Reading for Literature
  - Reading for Informational Text
  - Language
  - Writing
- The curriculum pack contains four types of activities:
  - Getting Started Open Creative or Expository Writing
  - Day-to-day Storytelling Sequencing of Events
  - Building and Telling Stories
  - Analyzing and Retelling

(CGO) education		
education	CURRICULUM	
Common Core Standards		
SPEAKING AND LISTENING		
Comprohension and collaboration Names for and collaboration allocated in a cases of conservations are forelable		
their cash dearly and personalizely.	lations with diverse partners, building on others ideas and expressing	
Integrate and evaluate information precented in diverse media and formats in Evaluate a specificit paint of elex searcoring, and use of avidence and network Presentation of knowledge and ideas:	County essant quantitatively, and coally	
Presentation of knowledge and ideas Present information, findings, and supporting existence such that interacts new	Sites the line of reasoning and the separation, development	
Present information, findings, and repporting evidence such that listeners can and style are appropriate to task, purpose, and audience. Make strategic case of digital media and visual displays of data to express into		
Adapt speech to a variety of contests and commaricative tasks, demonstrative		
READING FOR LITERATURE, READING FOR INFORMATIONAL	TEXTS	
Key ideas and defail		
Read closely to determine what the text says explicitly and to make logical into to apport conclusions drawn from the text.	rences from it; cite specific tectual avidence when writing or speaking	
Determine central ideas or therees of a text and analyze their development or Analyze how and why technicusts, events, and ideas develop and interact over	mnarite the key supporting details and ideas.	
Creft and electore		
Interpret words and phrases as they are used in a text including determining how specific word choices shape meaning or tone.	ectrical connotative and Bgurative meanings, and analysing	
Analyze the structure of texts, including how specific semiances, paragraphs, o relate to each ofter and the strule.	nd larger portions of the hext (e.g., a section, chapter, scene, or viance)	
Assess how point of view or purpose shapes the content and only of a test integration of knowledge		
Integrate and evoluate content presented in diverse media and formats, inclu-	ing viscally and quantitatively, as well as it words.	
Delivests and evaluate the argument and specific claims in a text, including $\Psi$ sufficiency of the evidence.		
Analyse how two or reare tests address situaliar thereas or topics in order to be. Hange of meding and level of test complexity		
Read and comprehend complex literary and international texts independently	and proficiently.	
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Intring objectives and an experimental of the process. built on other excerns clears a communication your can been a communication of the second seco

the scene by children, visiting the countryside or atting around a camplifie is just in the chyldrene are no exciting wild animals, and the chyldrato deours thein drat sky is into countryside, the sky has to finit, co to speak and ani way defin. The skins shine brightly, and thy cheepy crawles southe the definitions.

ther you are with friends on a camping trip, lighting a campfre for the very a. How will you set up camp? What will you be doing as night falls?

> to build theirvery owncampate with a campfire. lepict the countryside! ppan after nightfal? repair or and and lepide?

darm reflect and talk about each of their character

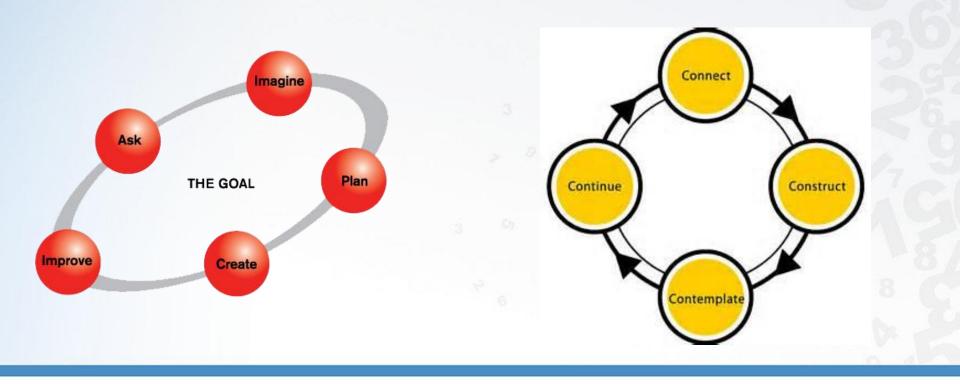
we the students influent and talk about each of their characters as they build What they doing? What are they spring? I how do they fee?? Trok do they react to the wild/in, and what annuls do they encourse? Come popula become frightened or homesick what campring often can be so excluded the they find. It hand to alive, build much the students around your campfile? What are the characters heaving to eat?

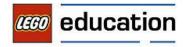


## **The LEGO Education 4C Learning Approach**

#### **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** 



WHAT HAPPENS NEXT? A volcanologist explains. new volcano - in her backvard!

Jenny Bloggs couldn't believe her eves and ears when she was awoken by a loud rumbling noise in her garden early on Thursday morning. A crack had appeared in the ground and hot ash and rocks were flying up into the air. Mrs. Bloggs was witnessing the birth of a

Our Weekly News reporter describes the scene as .....

#### **Fairy Tales**

#### Once Apon A Time.

there was a princess called Priscilla who was kept prisoner in one of the tall towers of the castle. She very badly wanted to find a prince to marry but her father, King Balthazar, did not like the idea of Priscilla moving far away to a foreign and distant countr Princess Priscilla cried and begged her father to let her out but he said NO and instead offered her the company of a little green frog.

Priscilla became best friends with the froggie and one day he suddenly looked up at her and told her that if she kissed him, he would make a wish come true.

My first fairytale Amanda Brick 3 grade



### Why use StoryStarter

- Increase Student Motivation
- Increase Student Engagement
- Practice the 4 C's of 21<sup>st</sup> 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**

#### Comics



**News** 



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My first fairytale Amanda Brick 3 grade



### **StoryStarter Rules and Management**

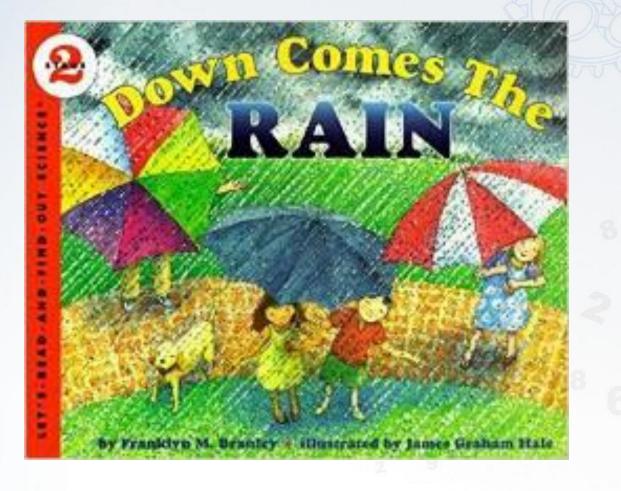
Rule of Representation: If you say it is... it is...
 If you don't have it, build it.
 LEGO Down > LEGO Found.

Other management suggestions can be found on the weebley 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 brink 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.CCR3) 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

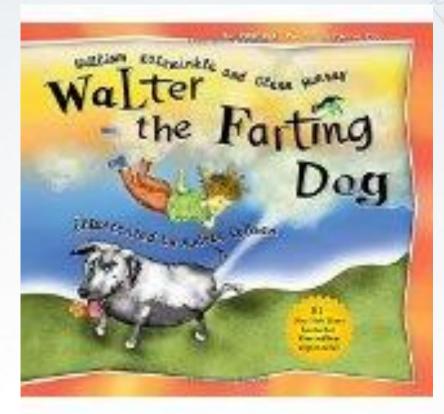
- Beginning
- Middle
- End

### Can you answer these questions?

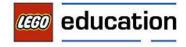
- What is your mission?
- Who are you there to help?
- When?
- Why is it important?
- Where?
- How did you make it better?



### **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.

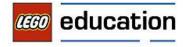




#### **Learning Objectives**

- 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.CCR3 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!

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



### 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



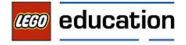


# Ways to Use StoryStarter For Literacy Across the Curriculum

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?





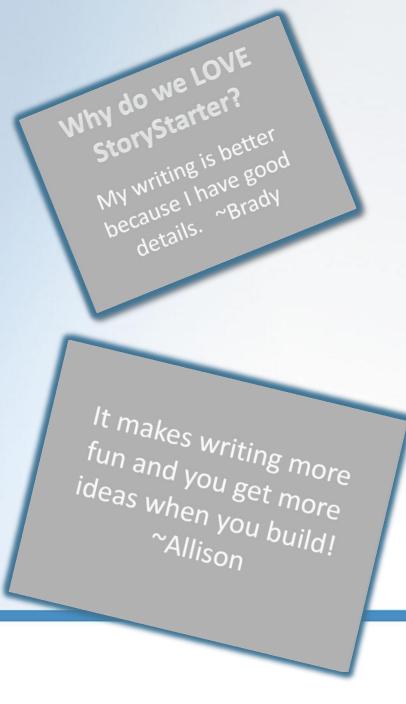


### **Questions?**

Please visit <u>www.LEGOeducation.us/StoryStarter</u> to Find:

- Videos
- Recorded Webinars
- Case Studies and more!

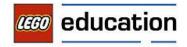




### **Student Reactions**

Collaboration **Motivation** things and my writing is Confidence Reflection **Creative Expression** FUN!

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



lt helps us get ideas.

Looking at my model

helps me remember

better when I use bricks. ~Teran

### **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 Elememntary School Madison WI

**C** 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

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

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

