

Blue Man Learning Lab

Technology Time Machine

Technology Timeline

Elementary School

Applying the Blue Man Creative Impulses

Technology plays a huge role in the changing world, and the Blue Man flirts and plays with it. The Blue Man is curious. Curiosity leads to experimentation. Experimentation leads to innovation. Technology is the product of innovation. This lesson looks across the breadth of technology, identifies important moments from the history of technological evolution, and makes critical connections between culture and innovation.

Lesson Summary

Begin the lesson by brainstorming the names of significant machines, devices, appliances, products, household items, and/or things-that-make-life-easier. Have the learners write down each object that they brainstorm, using a separate notecard for each object. Collect the notecards and place them on the chalkboard as the responses are provided during the brainstorming activity. Continue to collect cards until the list is long enough to provide 5 inventions to each group later in the activity.

Continue the lesson by letting learners know they will be creating technology timelines that connect inventions, historical events, and dates. Explain that they will be researching each of these inventions, putting them in the proper order, and learning more about what was going on in the world at the time these inventions were invented.

Once the task of the technology timeline has been introduced, divide the class into groups of 3-5 learners. Ask learners to appoint the following roles: a Leader who makes sure all group members participate; a Timekeeper who makes sure the group is aware of how much time the group has to complete the task at hand; a Scribe who records group ideas; and a Presenter who will share the group timeline with the larger group. All learners will be Researchers and Producers in the creation of the timeline.

Timelines need to include 5 inventions, 5 dates, and 5 historical events. Groups will randomly choose 5 inventions from the set of cards received during the brainstorming activity. Groups will then need to research the invention and

historical context of the date on which the invention was invented. Timelines will be evaluated on completeness, accuracy, attention to detail, and creativity.

Each group will present their timeline. Presentations will need: to explain the invention, to provide the year in which the invention was invented, and to detail a major historical event from the year.

Following the timeline presentations, guide all learners to collaboratively develop a comprehensive timeline on the chalkboard. The collaborative timeline needs to include all inventions that groups have researched, dates, and historical events.

Conclude the lesson by discussing the collaborative timeline. The collaborative timeline discussion can focus on the following questions: Are there particular trends in innovation that we see when we look at the collaborative timeline? Are there periods of time when inventions are more common and/or frequent? What do we see when we look at historical events and inventions together?

Connecting to Standards

- Reading Standards for Literature K-5 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity
- Writing Standards K-5 Texts Types and Purposes
- College and Career Readiness Anchor Standards for Speaking and Listening K-5 Comprehension and Collaboration, Presentation of Knowledge and Ideas
- College and Career Readiness Anchor Standards for Language K-5 Knowledge of Language, Presentation of Vocabulary Acquisition and Use
- Language Standards K-5 Knowledge of Language, Vocabulary Acquisition and Use, Conventions of Standard English

Everything Old Is New Again

Middle School

Applying the Blue Man Creative Impulses

The Blue Man feels the pulse of innovation and breathes in creativity and excitement. The Blue Man plays with mundane objects and turns those moments into pure joy. This lesson will explore the evolution of technology through looking at examples of obsolete technology and thinking about how obsolete technology might be used in the future.

Lesson Summary

Introduce this lesson by showing learners a table filled with objects of obsolete technology. Gather as many examples of obsolete technology as possible. The table

of obsolete technology could be organized thematically: items from a kitchen, items from a garage, communication devices, or sports equipment. Or, the table might include pictures of old modes of transportation, for example. In general, examples might include: an 8-track Tape Player, a Polaroid camera, a cassette tape, a typewriter, a rotary phone, an adding machine, an Atari game console, and a VHS player. The more obscure and outdated the technology the better.

Continue the lesson by asking learners questions about the technology. Have they ever seen any of the technology? Have they ever used any of the technology? Do they know about a current version of the technology?

After talking about the objects, let learners know they will be asked to become anthropologists from the year 2100 that have stumbled upon a warehouse of old objects. They will be asked to contribute chapters for a book entitled *Everything Old is New Again*. The book will be about current uses for old technology. Each chapter of the book will look at an object.

Once the book has been described, divide in to groups of 3-5 learners. Ask learners to appoint the following roles: a Leader who is responsible for making sure all group members participate; a Timekeeper who makes sure the group is aware of how much time the group has to complete the task at hand; and a Scribe who records group ideas; and a Presenter who will share the group progress with larger group. All learners will be Researchers and Authors in the creation of the book chapter.

Have each group choose one object from the table of obsolete technology. This object will become the subject of the book chapter that the group will write. Advise learners that their book chapter will be comprised of two sections. The first will describe the origin of the technology, the date it was invented, the need the technology was designed to fulfill, and how was it originally used. The second section of the chapter will discuss the current (2100) version of this technology. This section will describe the technology that is currently being used to serve the same purpose as the obsolete object once served. Encourage learners to be creative when writing about the current use of the technology in the year 2100. Ask learners to think beyond the original use of the technology, and consider what the world might look like in 2100. How might the technology fit into that world?

Each chapter will be evaluated on completeness, accuracy, attention to detail, and creativity.

Encourage learners to share their respective chapters once the book chapters have been complete. Group Presenters can present a chapter summary to the larger group.

Connecting to Standards

- College and Career Readiness Anchor Standards for Reading K-12 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity
- Reading Standards for Literature K-12 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity
- Writing Standards 6-12 Text Types and Purposes, Research to Build and Present Knowledge, Range of Writing
- College and Career Readiness Anchor Standards for Reading 6-12 Conventions of Standard English, Knowledge of Language, Vocabulary Acquisition and Use
- Language Standards 6-12 Conventions of Standard English, Knowledge of Language, Vocabulary Acquisition and Use
- Reading Standards for Literacy in History/Social Studies 6-12 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity

The Smartphone of 2150

High School

Applying The Blue Man Creative Impulses

The Blue Man communicates via technology. The Blue Man messages, jokes, and jabs. Bigger than life smartphones, electronic instruments, high tech lights, and super-charged soundboards are integral to the Blue Man life. The Blue Man uses the smartphone to poke at the soft underbelly of human communication. How do we say what we need to say within our virtually driven world? Is something lost when words are replaced with emoji? Are meanings changed in the translation from face-to-face communication to the latest smart device? In what ways does social media satisfy the curiosity that dwells within the soul? This lesson will allow learners to imagine how people will communicate in the future by considering the evolution of the smartphone.

Lesson Summary

Start the lesson by brainstorming the features of a current smartphone. Allow learners to reference their smartphones. Make sure the list is exhaustive and takes into consideration aesthetics and functionality. A few starter questions can include: What does the phone do? How it does it do it? What does it look like? What apps are generally available?

Once the list has been created, ask learners to consider the following questions: How does this technology allow learners to communicate with one another? How is communication improved by smartphones? How is communication complicated by

smartphones? Is it easier to communicate today than before smartphones? Are messages easily understood in a social media world? How might future smartphones aide communication?

Continue the lesson by explaining that learners will be divided into groups and put into project teams tasked with designing the smartphone of 2150. Explain that presentations will be developed as if they will be delivered to a group of potential investors.

Project teams should be comprised of 3-5 learners. Ask learners to appoint the following roles: a Leader who is responsible for making sure all group members participate; a Timekeeper who makes sure the group is aware of how much time the group has to complete the task at hand; and a Scribe, who records group ideas. All learners will be Researchers and Designers in the creation of the new smartphone.

Smartphone designs must have the following elements: a communications statement, and 5 visual representations of the smartphone.

The communications statement needs to address: how the new smartphone allows people to communicate in effective ways, what specific communication needs are met by the new smartphone, and how the new smartphone connects to the future of communication. The communications statement is the opportunity for each group to discuss how their new smartphone addresses the shortcomings of past communication and looks toward future communication.

Groups are also responsible for 5 visual representations. Visual representations can be produced by hand or by computer. Visual representations can be screen shots that illustrate solutions to communication issues solved by the new smartphone. Visual representations can be “then” and “now” pictures of how the new smart phone uniquely facilitates communication. Visual representations can be pictures of the functionality of the new smart phone describing the communication that is possible with the new phone.

Once the smartphone communication plans and screen shots have been developed, groups will need to prepare a 5-7 minute presentation. As previously described, the presentation will need to be prepared as if it was being delivered to potential investors. The presentation will need to summarize the communications statement and include all visual representations.

Following the presentations, a concluding a discussion can address the following questions: In what ways might the new smartphones make communication easier? Based on smartphone designs, what are potential challenges to communication in 2150? Having considered new smartphones, what might be new ways of communication in 2150 that might not involve a smartphone?

Connecting to Standards

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- Reading Standards for Literature K-12 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity
- Writing Standards 6-12 Text Types and Purposes, Research to Build and Present Knowledge, Range of Writing
- College and Career Readiness Anchor Standards for Reading 6-12 Conventions of Standard English, Knowledge of Language, Vocabulary Acquisition and Use
- Language Standards 6-12 Conventions of Standard English, Knowledge of Language, Vocabulary Acquisition and Use
- Reading Standards for Literacy in History/Social Studies 6-12 Key Ideas and Details, Craft and Structure, Integration of Knowledge and Ideas, Range of Reading and Level of Text Complexity