

Innovations

Overview: Use the Compass in a variety of ways to structure and deepen inquiry into innovations and their impact on our lives.

Grade: 6, Humanities (easily adapted for PYP “Where we are in place and time” or any general unit on inventions in science or humanities)

Estimated duration: 80 minutes

Unit Question: How do inventions impact our lives?

Area of Interaction: Human ingenuity

Significant Concepts:

- Different forces create innovation
- Innovation affects change
- Innovation impacts our lives

Learning Outcomes: Students will:

- identify significant innovations throughout history
- explain what factors have led to innovation
- connect how innovations have affected their lives

Background: Students have begun to notice different innovations and consider the circumstances that led to those innovations.

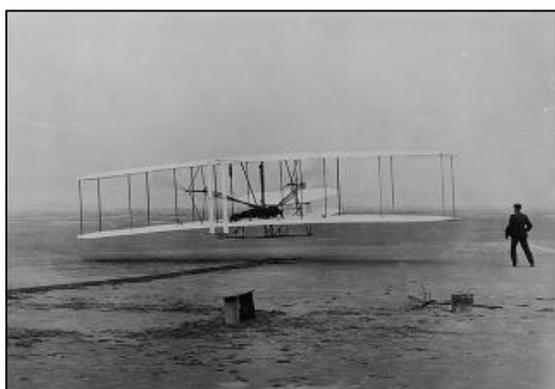
Resources/ Materials/Setting required: Short articles or videos about several selected innovations

Outline (Finding Out Lesson):

1. **Review** major innovations throughout history students have already thought about. **Select** four innovations many students have talked about, to delve into further in small groups (e.g., refrigerator, Facebook, paper, airplane – chosen for their span throughout time).
2. Divide the class into four groups. Each group focuses on one innovation and receives a small article or video about it. They use the Compass note sheet to **take notes** (individually) on what factors led to the creation of the innovation, then take turns **sharing** their notes. Each person is responsible for recording one Compass point’s notes onto the group Compass.
3. Students draw arrows to indicate linkages and **connections** between different factors that may have led to this innovation. They also generate questions to fill in gaps if a Compass point seems to lack information (e.g., “What were the economic factors that helped drive this innovation?”)
4. Students **think further** and try to answer, through each Compass point, “What impact has this innovation had on us (both societies and individually)?” Encourage them to use the Compass points to lead one effect onto another. As they write, generate a list of researchable questions (e.g., How much is Facebook worth? How much time do people spend on Facebook? Is there a link between Facebook and depression?)
5. **Extension:** Visually or dramatically represent the impacts the innovation has had. What do you think this innovation will spur? What is the spin off? Assign **further research** into the researchable questions as homework. Add to the group Compass later. Groups jigsaw and share.

Unit Context:

- At this stage, students are **finding out** about different types of innovations
- In the next phase of the unit students will delve into the “**sorting**” phase of inquiry and consider some major common factors driving innovation
- In the **going further** and **synthesis** stages of inquiry, students will conduct their own research into a particular innovation and make a presentation to the class on the forces that led to that innovation and the impacts and effects the innovation has had



What the compass does:

- Broadens the students’ perspectives on the factors that have led to the innovation
- Broadens the students’ perspectives on the impact/effects that the innovation has had
- Directs students to ask questions that may not be as obvious
- Gets the students to form links between the factors leading to innovation and effects of innovation