



The Power & Peril of Smartphones

A life-changing innovation

Dr. B explores the undeniable influence of smartphones on modern life. Are they the ultimate tool for progress or an innovation of distraction?



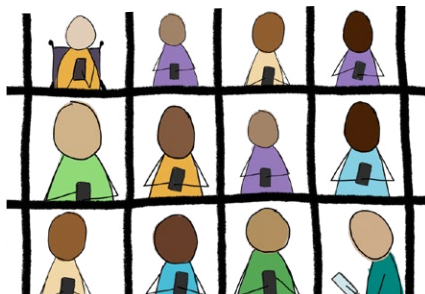
Watch the show!



<https://youtu.be/0k3YVGMMyEYo>

Quick Questions

1. Aside from the smartphone, name one invention that you think has had a significant impact on humankind. What was that impact?
2. How old do you think someone should be before getting a smartphone? Why?
3. Think about yourself or other people you know who have smartphones. When are you (or they) separated from that smartphone, if ever?



Deep Dives

1. Should students have access to smartphones in classrooms? Why or why not? What reasons, if any, can you think of that students would want or need access to smartphones during class? Are there any potential risks or dangers?
2. Make a list of at least three positive and three negative impacts of smartphones. Based on your list, do you think smartphones do more harm or more good? Explain.
3. If you have a smartphone, have you ever tracked your usage in the settings? (How many hours per day do you use it and for what?) If you do not have a smartphone, what do you think you would use it for most? The video says that, on average, Americans are on their phones about 4.5 hours per day. Does this seem like a little or a lot to you?
4. Imagine you are planning a study to investigate smartphone usage and its impact on human health. You need to choose just one aspect of human health to study. What would you study, and why? How might you design your study to eliminate other variables (aside from smartphone usage) that could impact your results?
5. Some people are concerned that excessive smartphone use could affect sleep patterns, mental health, productivity, and quality of life. While researchers are still digging into this to learn more, we can each make our own decisions about our personal smartphone usage. Do you think it is valuable for individuals to limit their smartphone usage? Why or why not? Should there be a minimum age before you can use a smartphone? Why or why not?

Engaging in Science Discussions



Recommended Grade Level: Middle and High School

Objective: To engage in open-ended discussions about critical science topics. While leading these discussions, it is important to ensure that everyone is heard, and everyone is treating one another with respect. There is no “right answer” during these discussions, and it’s okay to respectfully disagree.

Additional Notes: We recommend having these discussions multiple times with the same group of participants. This provides the opportunity to explore different topics and improve one’s abilities to have successful conversations about STEM topics. Quick Questions are optional and are recommended to be used as warm-up questions.

Materials: TV or projector Paper and writing utensils

TIMELINE (30 – 40 MINUTES)

5 min	10 min	5 min	10 min	10 min <i>(optional)</i>
Intro + prompts	Watch segment	Think/write time	Share with partner	Small groups

Intro (5 min) Before starting, select one Deep Dive question. Tell the group you will be asking them a question that has no right or wrong answer. After they watch the clip, they will have time to think about and write their response. They will share their response with a partner or small group. Now share the question you selected.

If participants are new to these sorts of discussions, you may want to review the following concepts:

- When you are sharing your responses, provide reasoning and evidence. Reasoning is your own thinking behind your answer. Evidence is facts that support your answer, such as historical facts or scientific facts. You may also have experiences from your own life that support your answer.
- When listening to your classmates, ask questions. The purpose of questions is to better understand their thought process, not to challenge them. Some ways to frame questions are: “I didn’t understand X.” “Could you explain Y again?” “What do you mean by Z?”
- If someone asks you questions, provide clarification. Explain your reasoning and evidence. Remember that there are no right or wrong answers.

Watch the segment (10 minutes)

Think/write time (5 minutes): Participants write down their answers

Share with a partner (10 minutes): Pair up participants. Each person has 5 minutes to share their response and answer questions from their partner. Then switch so each partner gets a turn.

(Optional) Small groups (10 minutes): Put participants in groups of 4 for share-outs and conversations.

(Optional) Homework prompts: Expand your response into a report, picture, poem, essay, short story, song, or performance. Or, write your own discussion question for the group.