The Psychology of Technology

What Science Tells Us About Student Digital Wellness

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Poll:

What is the most important lesson your students need to learn about digital citizenship?

- Engaging Respectfully Online
- Personal Safety
- Balancing Screen Time
- Online Privacy
- Fact vs. Fiction Online

But first, housekeeping.

Audio

Listen through your computer speaker or by calling (213) 929-4221

access code:
586-408-853

Questions

Type in the questions box and we'll get to your questions in real time or address them during the Q&A

Social

Find us on Twitter **@EVERFIK12** and use **#EVERFIempowers** when you share out

A recording will be emailed to you following the webinar.

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Today's Agenda

1 Introductions

2 Dr. Rosen
Psychology, Technology and the Adolescent Brain

3 Behind the Scenes:
Program Development

4 Taking Lessons to Practice:
Implementing Digital Wellness

5 Q&A

Introductions

Lauren Pingul
Romeoville, IL
Former Senior Seminar Teacher
Used EVERFI Financial Literacy

Jacquie Moen
Washington, DC
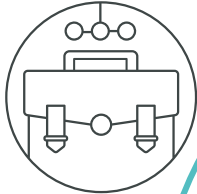EVERFI Sr. Product Director for
Social-Emotional Learning

Dr. Larry Rosen
San Diego, CA
International Expert in the
Psychology of Technology
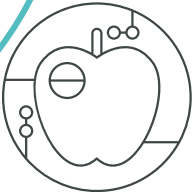
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Whole Child Education

Career Readiness

Social and Emotional Learning

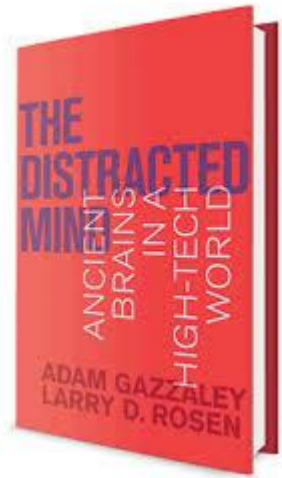Financial Capability

Health and Wellness

Dr. Larry Rosen

Psychology, Technology and the Adolescent Brain

Our Students Face An Attention Crisis: Understanding Their Distracted Minds

Dr. Larry D. Rosen
California State University, Dominguez Hills

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Three Vital Questions
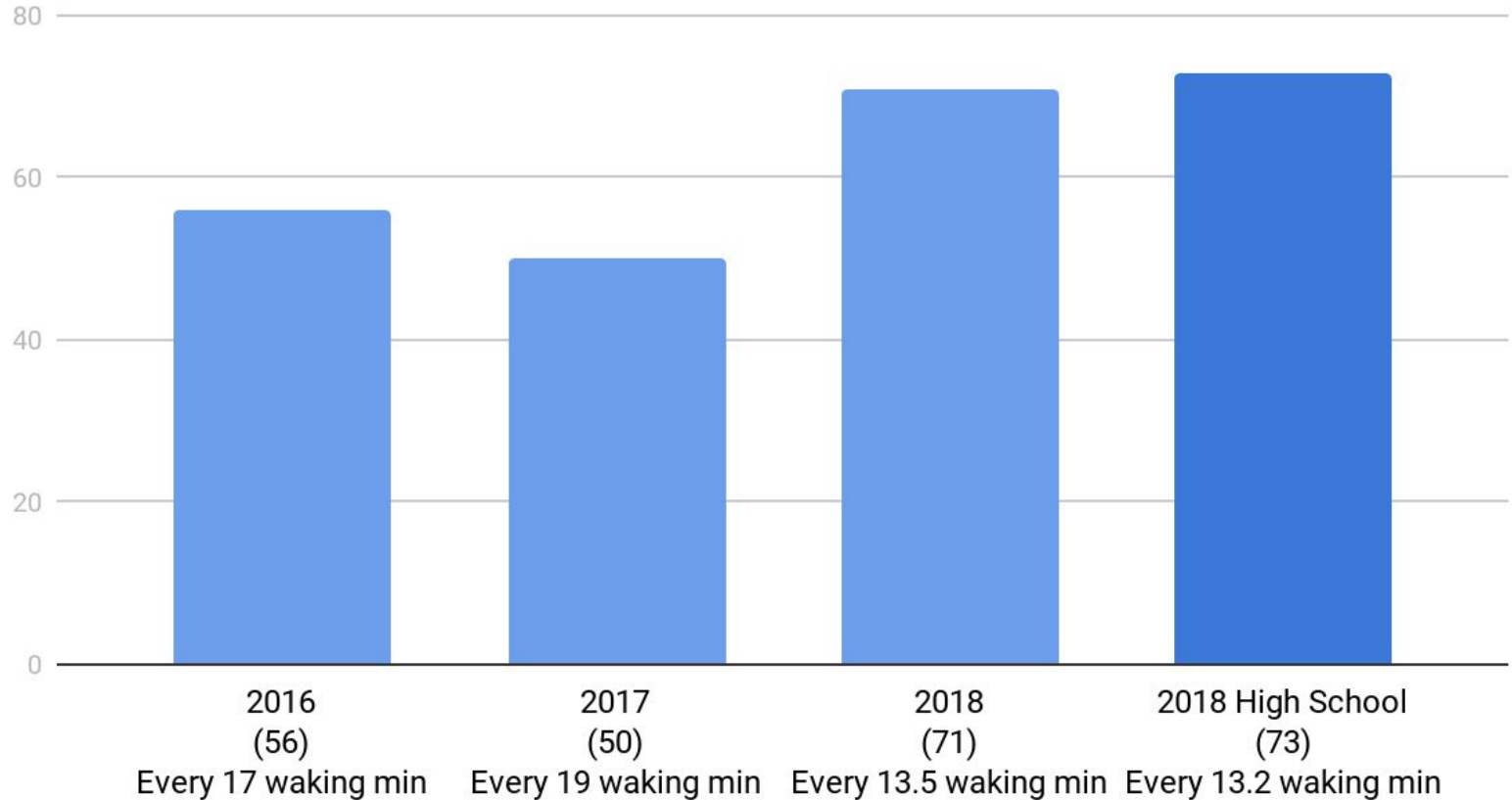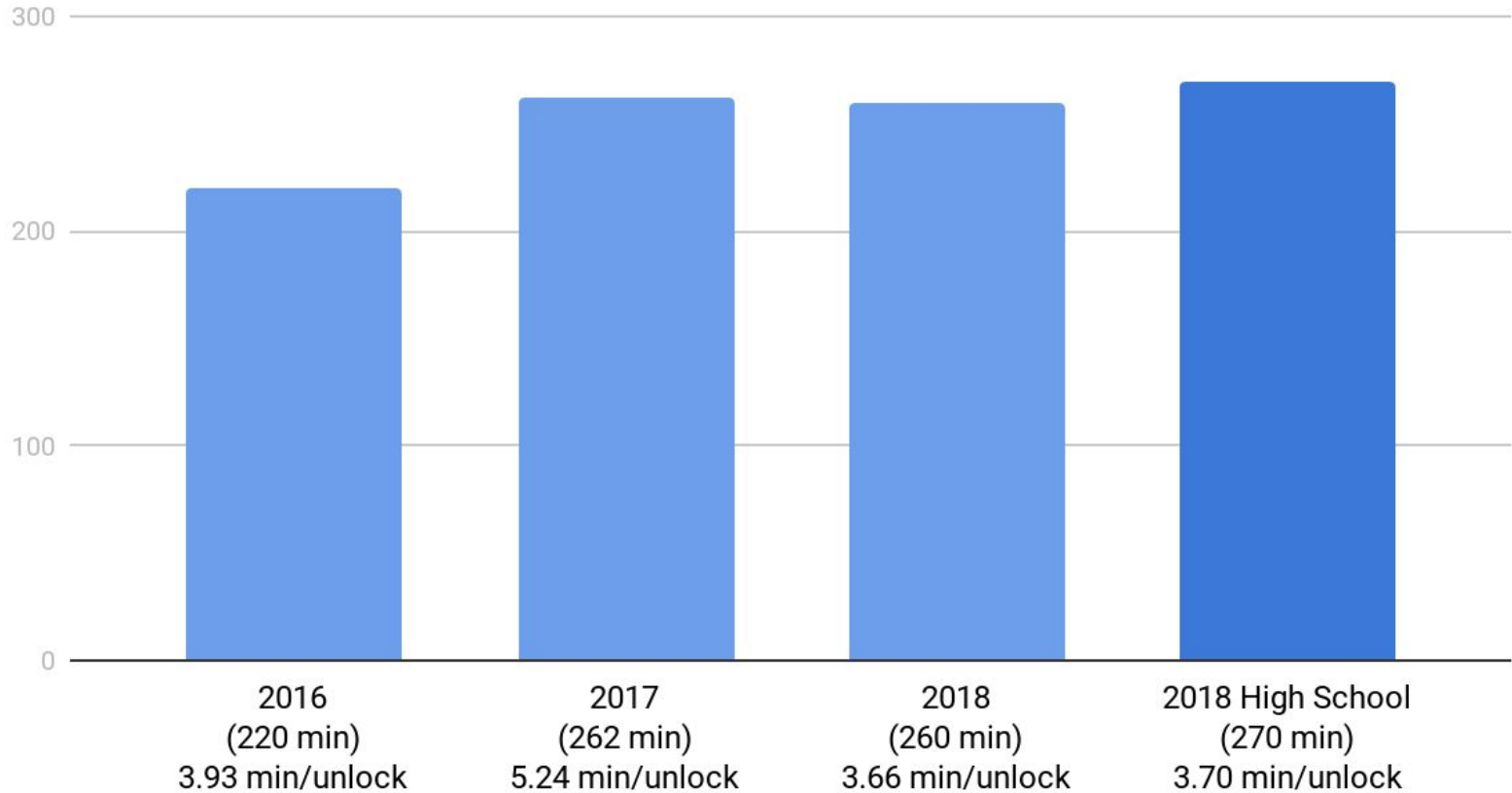
WHAT?

WHY?

HOW?

WHAT?

- **What are students doing with their technology in and out of class?**

- **What tasks do they attempt to multitask?**

- **What does multitasking do to learning?**

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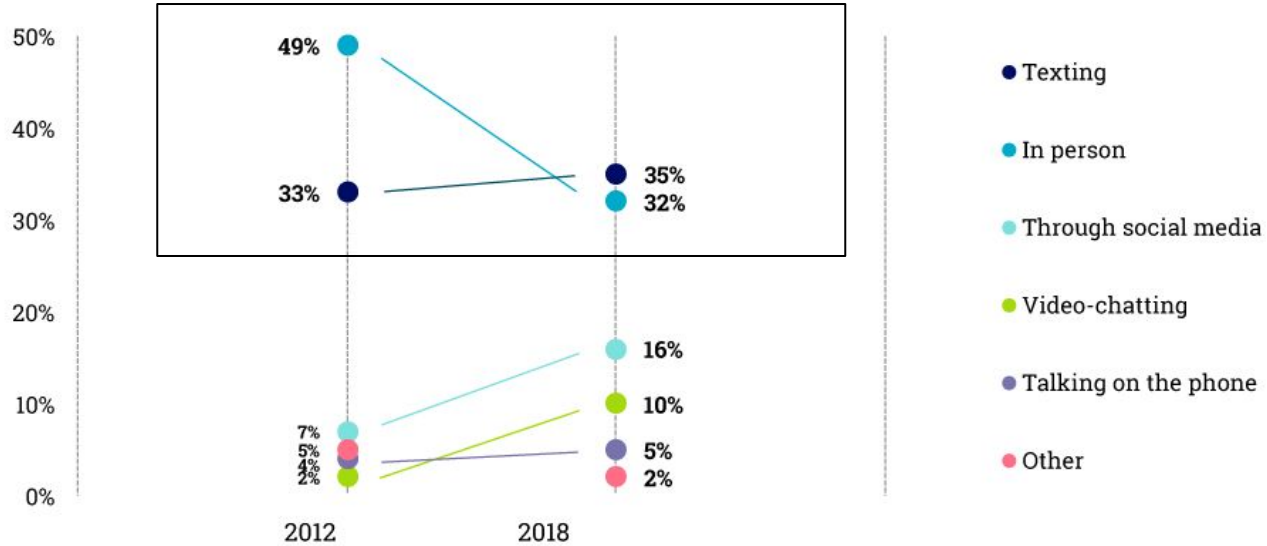Daily Smartphone Unlocks

Category	Value
2016 (56) Every 17 waking min	56
2017 (50) Every 19 waking min	50
2018 (71) Every 13.5 waking min	71
2018 High School (73) Every 13.2 waking min	73

Daily Smartphone Minutes

It's All About Communication

Teens' Favorite Way to Communicate With Friends — marketing charts

- **Texting** — 49% (2012), 35% (2018)
- **In person** — 33% (2012), 32% (2018)
- **Through social media** — 7% (2012), 16% (2018)
- **Video-chatting** — 2% (2012), 10% (2018)
- **Talking on the phone** — 4% (2012), 5% (2018)
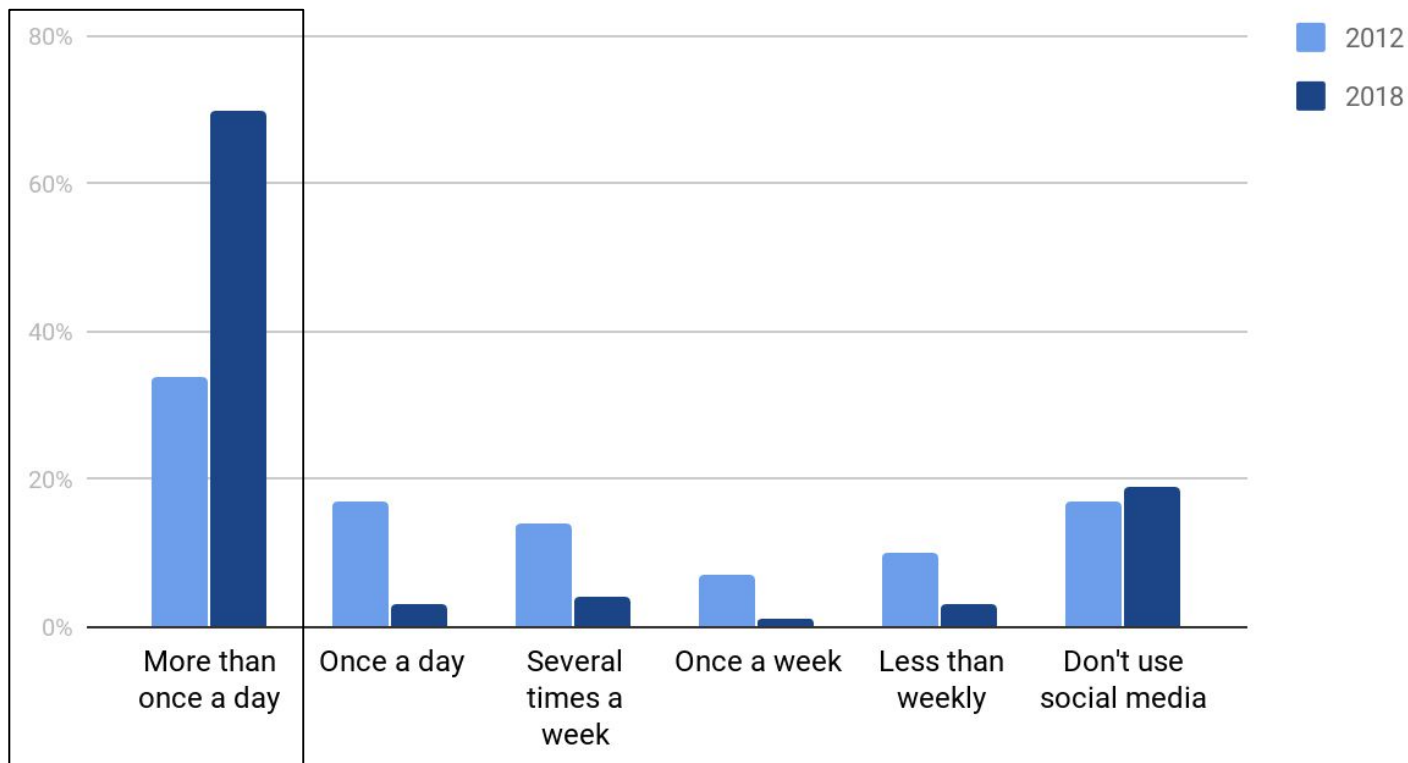- **Other** — 5% (2012), 2% (2018)

Published on MarketingCharts.com in September 2018 | Data Source: Common Sense Media
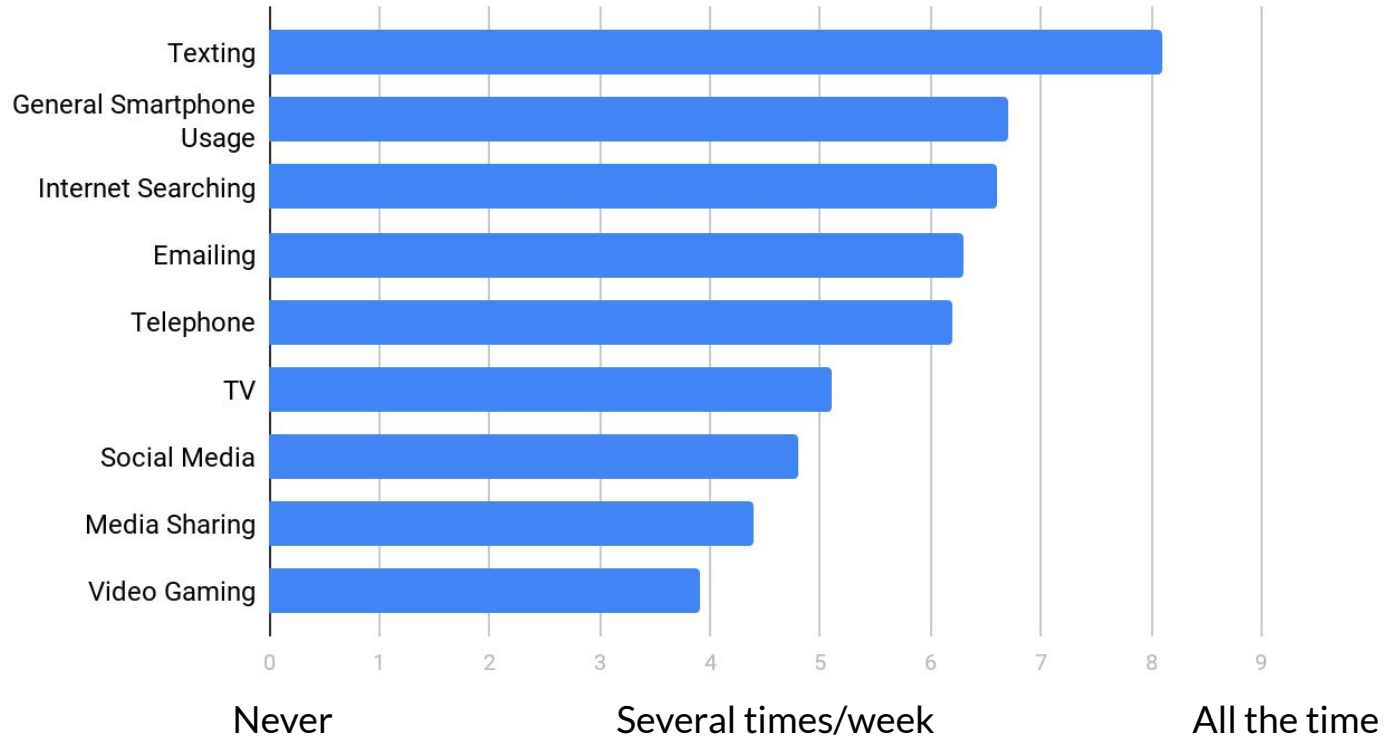
2018 data based on a nationally representative survey of 1,141 13-17-year-olds in the US fielded online by GfK from March 22, 2018 - April 10, 2018.

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Millennials vs. Gen Z

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Social Media Use Is Exploding

Frequency of teen use of social media

What Are Students Doing With Technology?
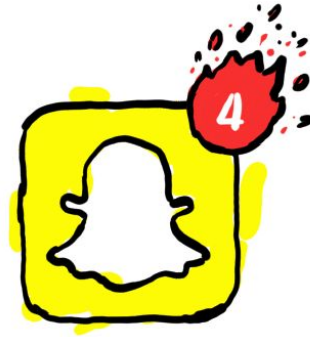
Is It Really Multitasking?

- Task Switching

- Continuous Partial Attention

- Bottleneck Theory

- Prefrontal Cortex Development

- Biochemical Control? - Stress/Anxiety

Technology Makes Them Do It

In the Real World:
External Interruptions

- The "alerts" that come from smartphones

- TV changed, too - to grab our attention with short scenes, quick changes

Inside the Brain:
Internal Interruptions

- Mind wandering

- Mind is always thinking about tech

  - EXCITED
  - ANXIOUS
  - BOTH

Study of Studying: A Case of Distracted Learners

- 279 students observed studying
  [middle school, high school, college]

- 15 minutes – observe every minute

  - On-task or off-task?
  - What is on computer screen?
  - Daily use of technologies and media
  - Studying strategies?
  - Preference for task switching
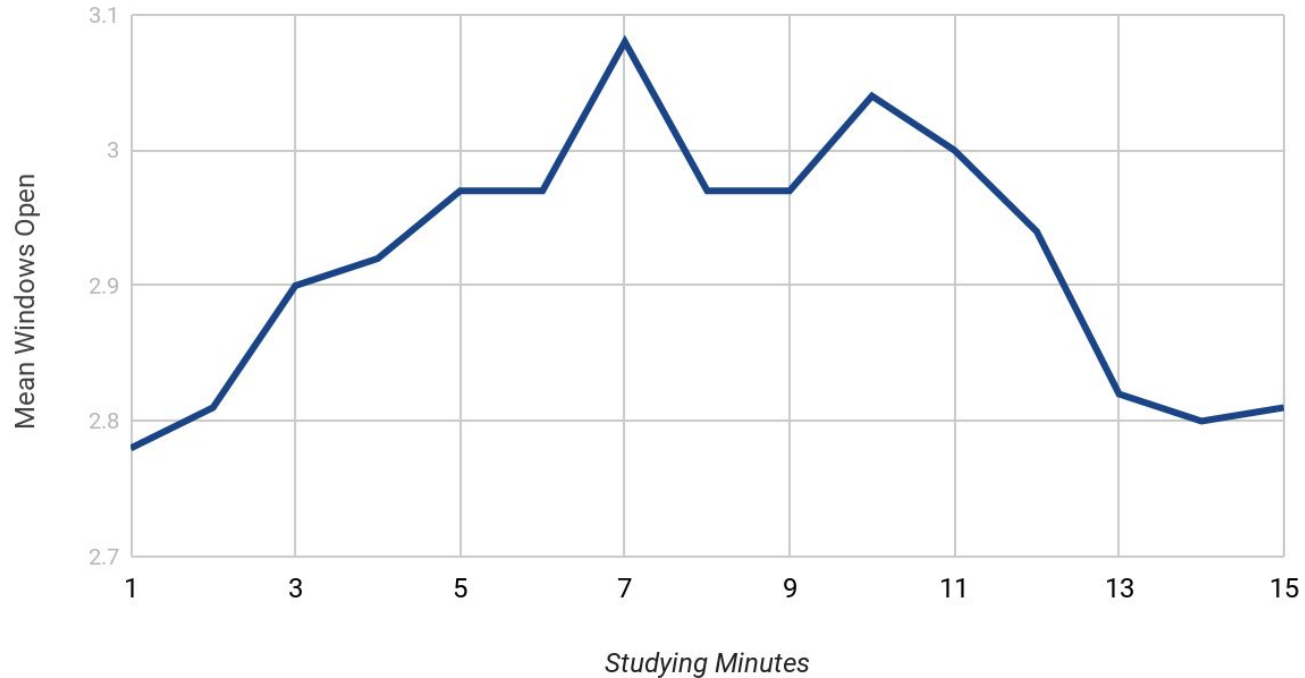
- School GPA

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What We Found:

On Task Percentage Over Time for 15 minutes Studying Across All Grade Levels
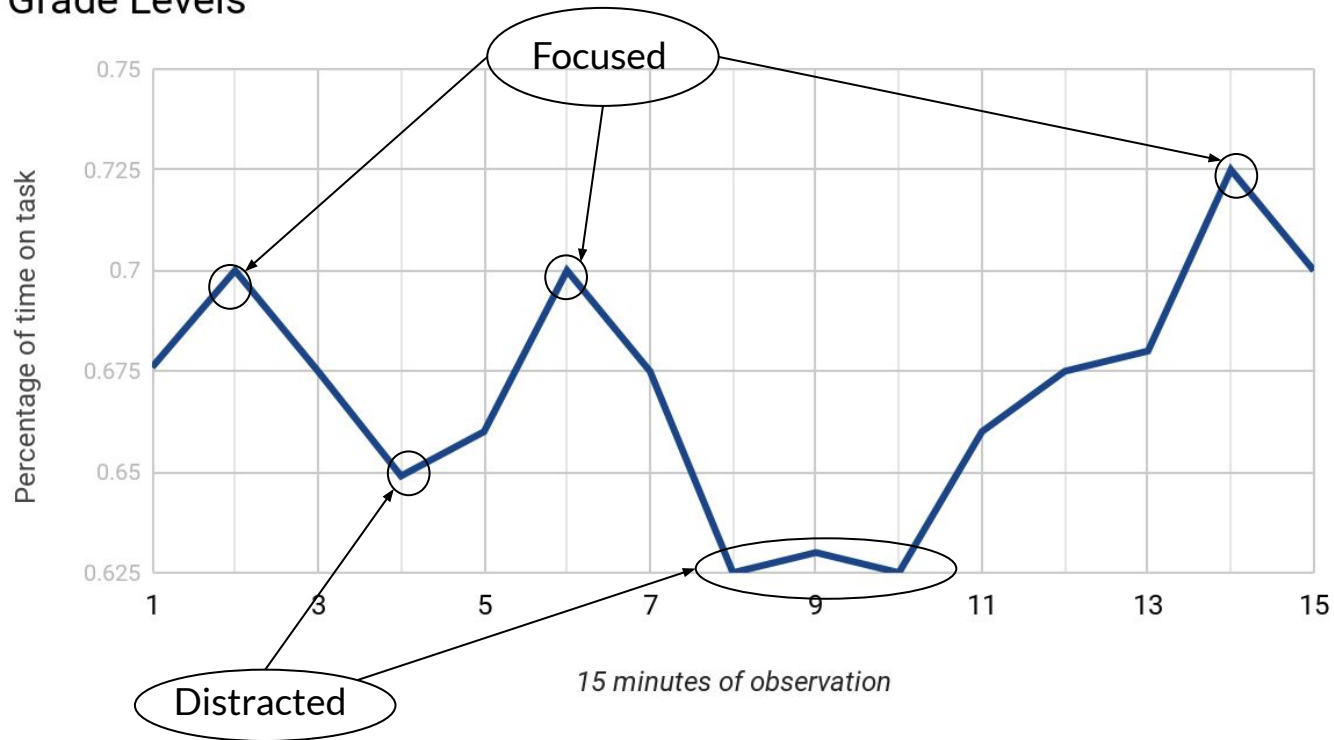
The Most Off-Task Students Had the Most Windows Open

Windows open over 15 minutes studying time

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The Importance of Metacognition

- Knowing how your brain works
- Knowing how you best function in a tech-rich environment & how to reduce distractions
- Knowing when your brain is "overloaded" and how to calm it down

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Technological Anxiety

"NOMOPHOBIA" (or, no-mobile-phone-phobia):

- The feelings of anxiety or distress that some people experience when not having their phone,

- The fear of not having a phone signal, or

- The fear of running out of battery power
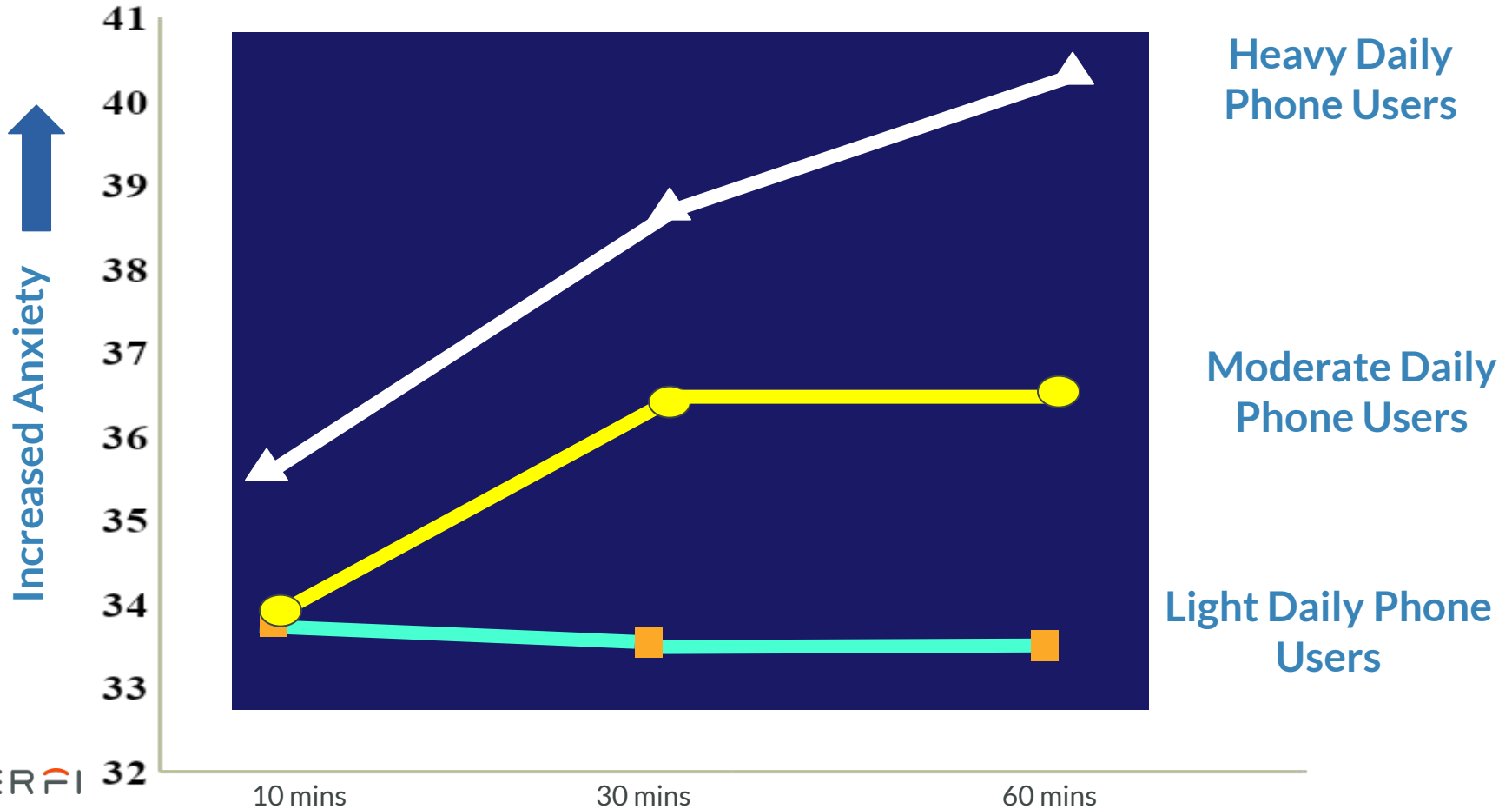
Our Study of Obsession & Anxiety

Cheever, Rosen, Carrier, & Chavez (2014)

- 163 college students
- Half allowed to put smartphones under desk
- Half had smartphones removed

The Task? Just sit there and do nothing – no talking, no school work. NOTHING

Measured anxiety three times: 10, 30, 60 minutes after losing access to the phone

Who is most impacted?

The Role of Boredom

- Shortened Attention Span (shorter than a goldfish?)

- Research In Many Arenas: 3-5 Minutes With Up To 20 Minute Resumption Lag

- Research Shows a Student Brain Starts To Leave A Studying Task For A More Interesting Task Up To 30 Seconds Before

- Constant Second Screening

Executive Functioning in the Prefrontal Cortex

- Executive controller
- Working memory
- Attention & focus
- Decision making
- Multitasking control
- Impulse control
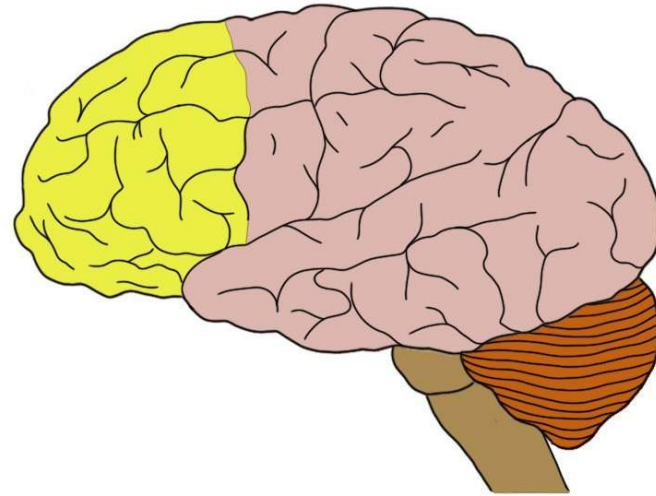
Strategies for Helping Students Succeed

Improve
Metacognition

Decrease
Accessibility

Decrease
Anxiety

Decrease
Boredom

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1. Improve Metacognition

- Strategy: Understand the Costs of Task Switching
  - Example: CNN & Crawl
  - Decreased Learning
  - Increased Time
  - Increased Stress
- Strategy: Monitor Time With Technology (apps)
- Strategy: Keep Track of Distractions (Screen Time, Digital Wellbeing)

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2. Decrease Accessibility

- Create Technology Free Zones

- Quiet Work/Study Area

- Single Screen

- Close [NOT MINIMIZE] Windows, Apps, Tabs

- Move Social Apps Out of Sight

- Turn Off Notifications, Alerts

- Close email – Check On A Schedule

- Consider Apps That Help Control Environment (SelfControl, FocusMe, KeepMeOut)

- TECH BREAKS

- Better Nighttime Choices

3. Decrease Anxiety

- DO NOT BE PAVLOV'S DOG

- Set Expectations for Others

- Use Automatic Email Replies/Social Media Posts

- Use Apps to Auto Reply to Calls, Texts

- Allow Calls From People With Potential Emergencies

- Practice Meditation and Mindfulness

- Physical Exercise Reduces Anxiety

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4. Decrease Boredom

- Program in Breaks to "Reset Your Brain"

  - Nature, Exercise
  - Short Naps
  - Talk to a Human Being
  - Read Joke Book, Grab a Snack, Listen to Music

- Standing Instead of Sitting Increases Blood to Brain

- Play "Familiar" Music in the Background

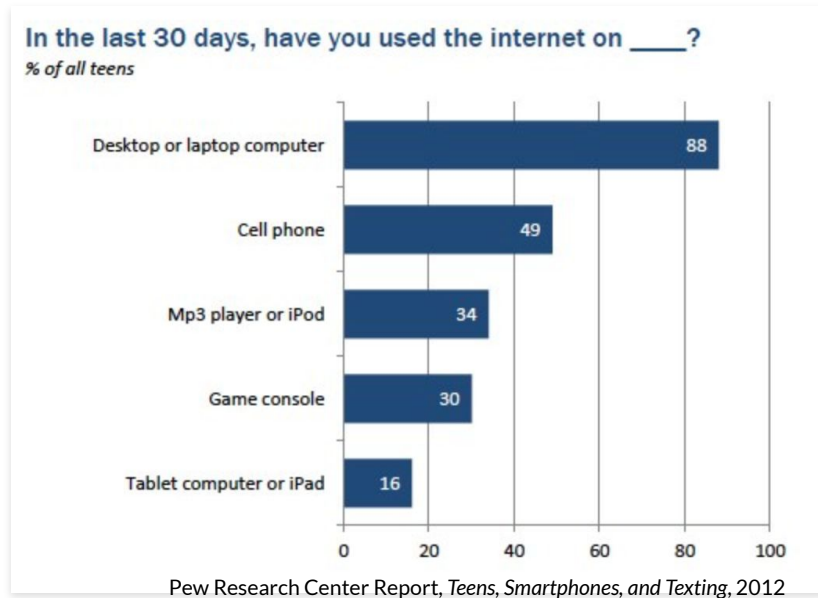- Use Tech Breaks to Increase Time On Task

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The Changing Digital Landscape

2012

- **23%** of teens have a smartphone

- Socioeconomic divide

In the last 30 days, have you used the internet on _____ ?
% of all teens

Device	%
Desktop or laptop computer	88
Cell phone	49
Mp3 player or iPod	34
Game console	30
Tablet computer or iPad	16

Pew Research Center Report, *Teens, Smartphones, and Texting*, 2012

2019

- **95%** of all teens have access to a smartphone

- Smartphone ownership universal across socioeconomic lines

45% of teens say they're online almost constantly

% of U.S. teens who say they use the internet, either on a computer or a cellphone ...

	Almost constantly	Several times a day	Less often
2018	45	44	11
2014-2015	24	56	20

Pew Research Center Report, *Teens, Social Media and Technology*, 2018

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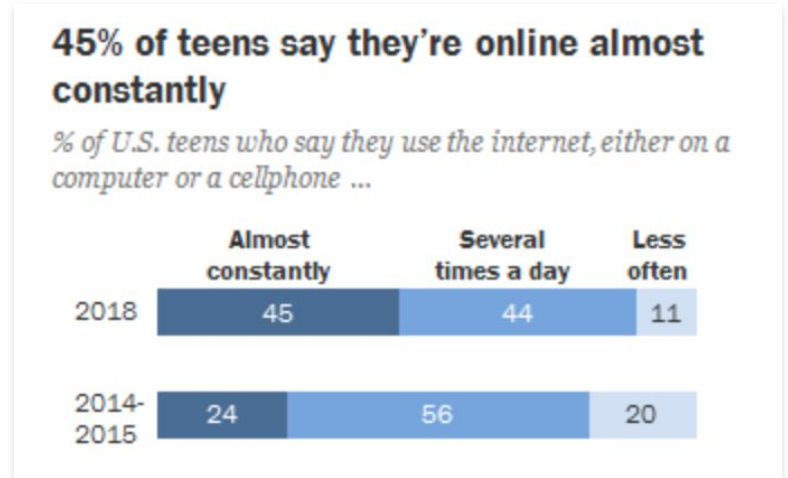
Student Perspective on Technology

Youth across the country interact primarily on their devices, through networks and platforms that enable connection and confidence.[1]

...But they need new knowledge about how to make smart choices with technology.

8.5
Average number of hours kids spend on technology per day

54%
Of teens agree that being online distracts them from homework or people they're with

Despite viewing their personal experience online as positive,
68%
Of teens agree that social media "has a negative impact on many people my age"

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Mission Statement

Empower students to use digital platforms safely and to make decisions about technology with self-awareness, respect, and confidence.
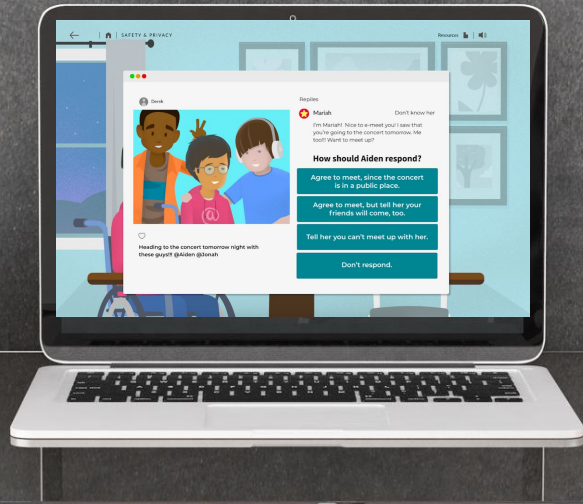
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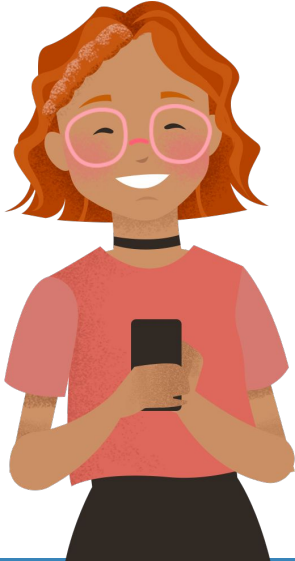
Ignition
Digital Wellness and Safety

Grade Level: 6th -9th

Total Lessons: 6 digital lessons, about 25 minutes each

Aligns with CASEL SEL Framework, CCTC (Common Career Technical Core); ISTE Student Standards

Suggested Class Fit: CTE, Computer Science, Library Science

At-a-Glance

Ignition is a digital literacy and citizenship course dedicated to providing middle school students with the skills they need to safely and confidently navigate the digital world. The course helps students acknowledge the benefits of digital communities and resources while guiding them to successfully navigate potential pitfalls in their digital lives.

Course Highlights

- Interaction scenarios help students practice healthy and safe behavior
- "Digital Tips" help students understand key course objectives
- Guided classroom discussion guides
- Parent Materials and ideas for teachers on how to use effectively

Course Topics

- Digital safety and privacy, including data protection
- Screen time vs. Offline time
- Evaluating digital sources and content
- Managing online connections and communities

Behavioral Outcomes

Upon completing Ignition 2.0, students will....

1 Take steps to safeguard privacy and safety online

2 Ask for help when feeling unsafe online

3 Treat people in online communities with the same respect as one would in person

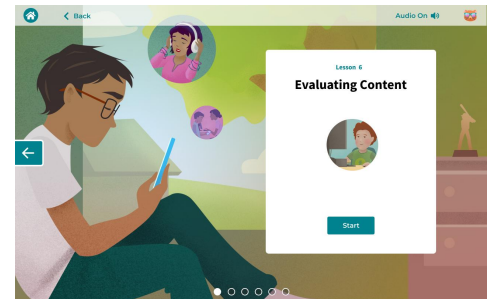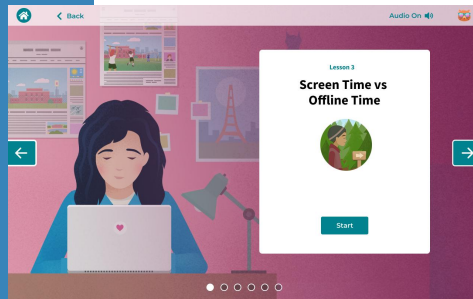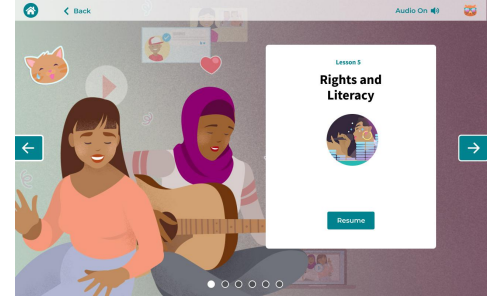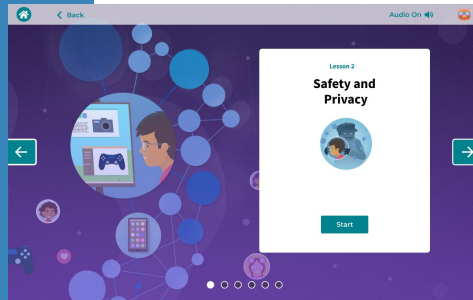**4** Take steps to verify content and perspective before using online material
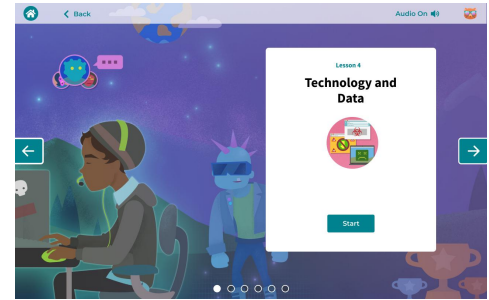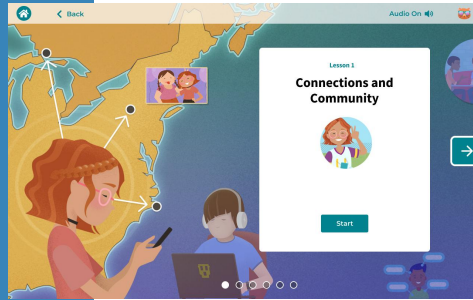
5 Participate confidently with others to create, co-create or use online material

6 Take time offline to maintain happiness, personal connections, and positive mental health

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Lessons

Classic vs. New Ignition: Digital Wellness & Safety

What's New?

- Shorter, more digestible modules
- New standards: CASEL, CCTC, ISTE new
- New Content:
    - Digital footprint
    - Digital emotional intelligence
    - Digital drama
    - Screen time vs. offline time
    - Privacy: location tracking
    - New content sources: sponsored content, "fake news"
    - Malware sites
    - Internet predators

What Continues?

- Ability to meet Children's Internet Protection Act
- Key Topics:
    - Online safety and privacy
    - Digital literacy and copyright
    - Evaluating sources
    - Protecting online identity
    - Using technology responsibly, at school, at home and in car
    - Digital relationships and respect
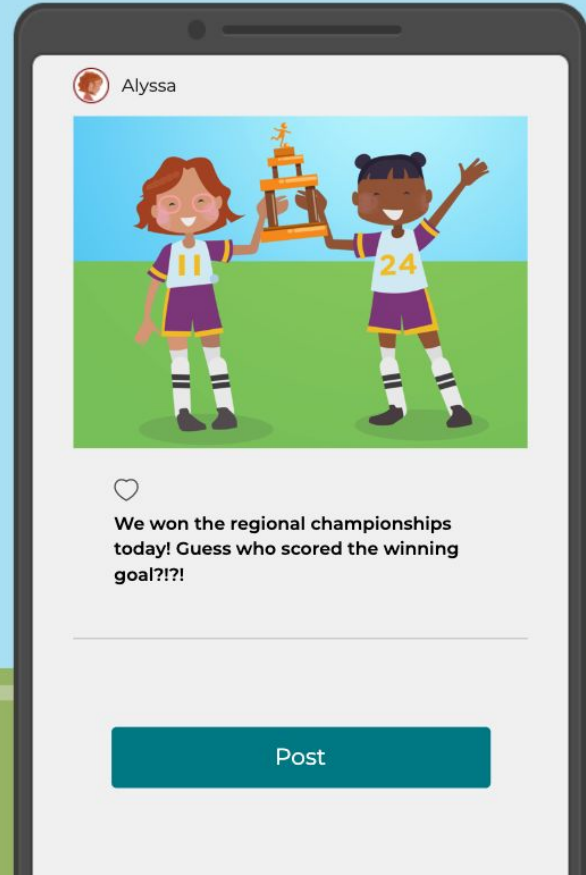   - Consequences of overusing technology
    - Preventing viruses

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Meet Alyssa

She loves to share what's going on in her life on social media. It helps her stay in touch with family who live far away and keep friends updated on important stuff.

Alyssa

We won the regional championships today! Guess who scored the winning goal?!?!

Post

EVE

Alyssa

Had so much fun at Mya's party!

Sometimes, when you post things online, people can react in ways you don't expect. But you can't always tell what people are really thinking or feeling.

Explore the responses to Alyssa's latest post. See how some people's online impressions can be different than their real life.

Continue

Priyah

😘 😋

Learn More

Danger32

Mya had a party? Ha! With her ONE friend?

Learn More

Mya

Like you have ANY friends, Danger32

Learn More

Derek

Don't listen to him, Mya. You've got lots of friends!

Learn More
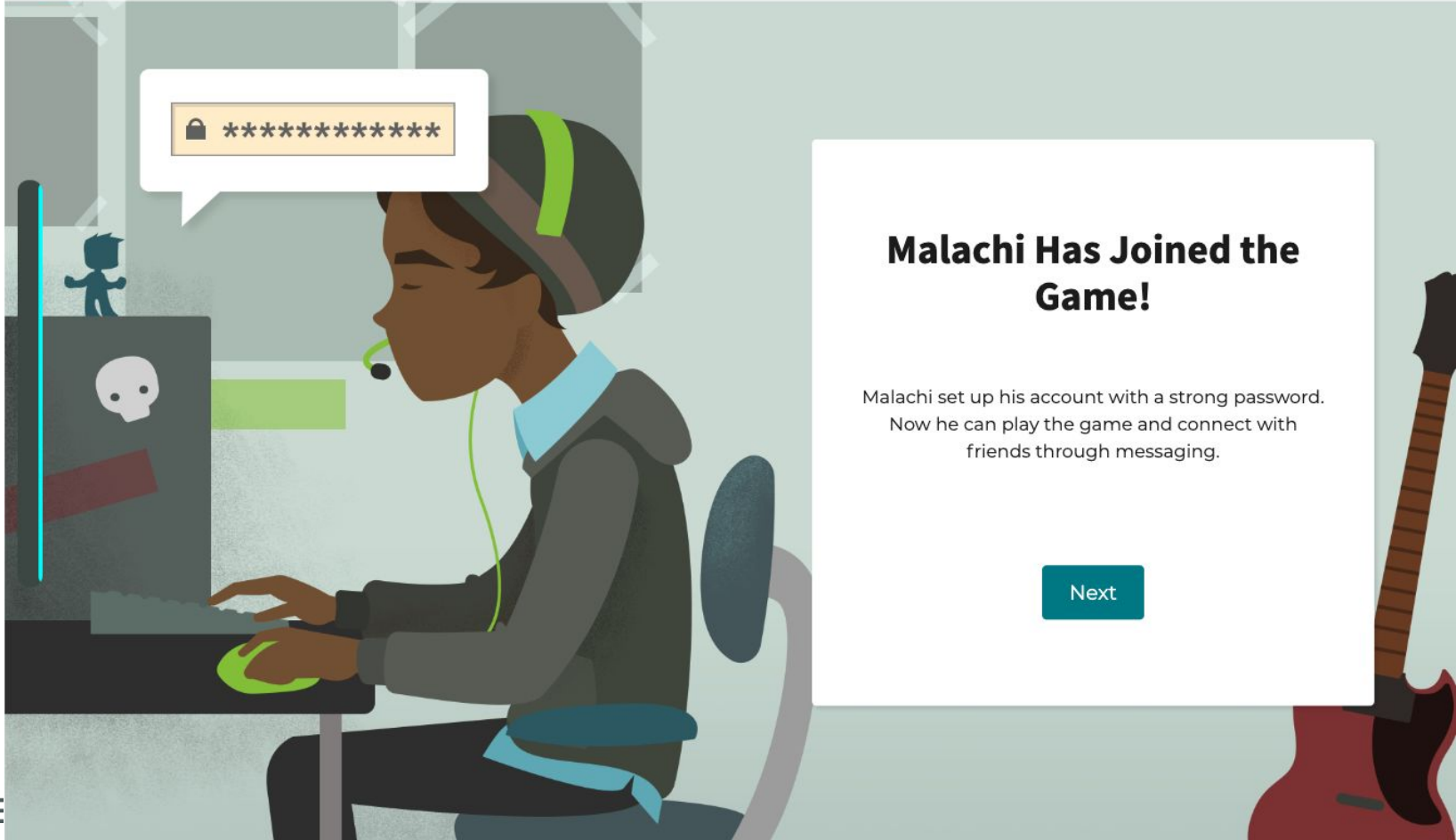
EVE

Malachi Has Joined the Game!

Malachi set up his account with a strong password. Now he can play the game and connect with friends through messaging.

Next

💬 **Poll**

What's your favorite way to create strong passwords?

Using a mix of letters, numbers, and symbols

Using the first letters of each word in a phrase

Not using information I share on social media

I need to change all of my passwords to make them stronger

EVE

REC

Watch it Go Viral!

EVE

Blogger

A blogger loved Neveah and Camryn's video and linked to it on her blog, which gets three thousand hits a month.

Local Celebrity

A local celebrity saw the video and thought it was fun, so she shared it with her hundred thousand followers.

Next

Local N

A local ne hometown cluded the st

Online TV

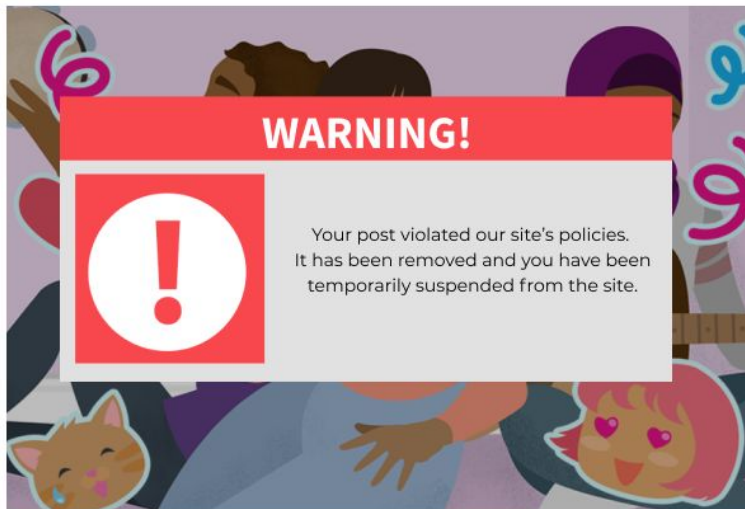An online TV channel did a story about kids and creativity and used Naomi and Camryn's video as one of their examples.

Social Influencer

A "social influencer" (someone with a lot of followers and connections) shared it on his social media.
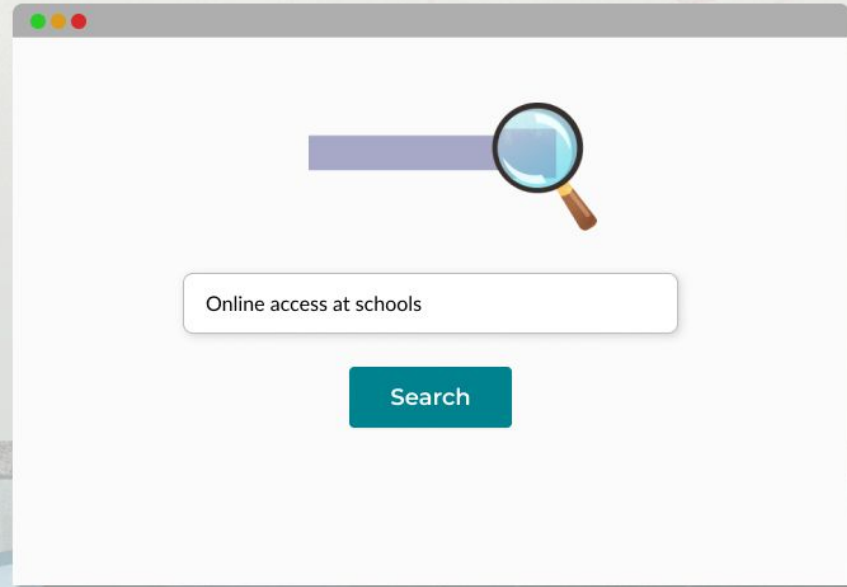
Help Jorge

Jorge has a class paper on schools and online access due soon and he needs to do some research for it. Help him figure out how to evaluate the sources he finds.

Online access at schools

Search

EVE

Online access at schools

Image results

View

Web results

News article: More Schools Getting Online Access

https://www.schoolinfoonline.com

View

If students in middle school have online access, is that good or bad?

https://www.answersfromexperts.com

View

Education blog: *How Can We Help Prepare Students for Their Future?*

http://www.iloveeducation.blogs.com

View

#OnlineAccessinSchools

https://socialmediasite.com/hashtag/onlineaccessatschools

View

EVE

Curriculum Fit

Subject Fit

- CTE
- Computer Science
- Library Science
- Health (Screen Time lesson)

Social and Emotional Learning & Wellness Portfolio

Elementary School	Middle School	High School
The Compassion Project	Character Playbook	Honor Code
Healthier Me (ES)	*Ignition: Digital Wellness and Safety*	Mental Wellness Basics
	Healthier Me (MS)	Prescription Drug Safety
		Alcohol EDU for HS

Taking Lessons to Practice:

Implementing Digital Wellness

Lauren Pingul

The Advantage of Ignition

- Student-Focused
- Robust Online Content
- Promotes Mental Health and Digital Wellness

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Teacher Survey - Popular Lessons

Lesson 2

Safety and Privacy

Lesson 3

Screen Time vs. Offline Time

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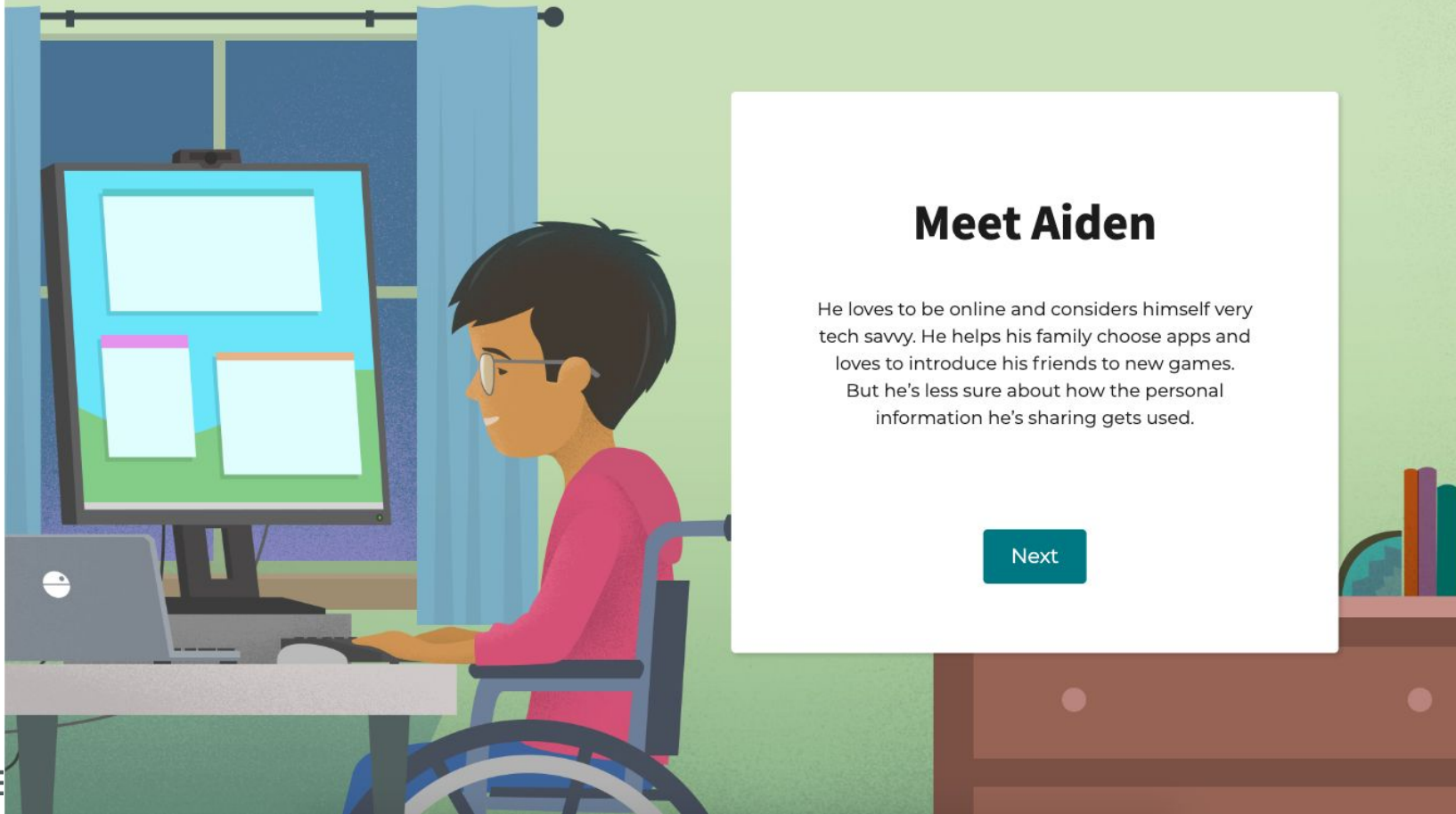
Meet Aiden

He loves to be online and considers himself very tech savvy. He helps his family choose apps and loves to introduce his friends to new games. But he's less sure about how the personal information he's sharing gets used.

Next

Derek

🤍

Heading to the concert tomorrow night with these guys!!! @Aiden @Derek @Jonah

Repiles

Mariah   Unknown

I'm Mariah! Nice to e-meet you! I saw that you're going to the concert tomorrow. Me too!!! Want to meet up?

What should Aiden do?

Agree to meet, since the concert is in a public place

Agree to meet, but tell her your friends will come, too

Tell her you can't meet up with her

Don't respond

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Implementation Strategies

Review or Capstone Project

Introduction to New Material

Flipped Classroom

Guided + Independent Practice

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Teacher Resources

- Lesson Plans:
    - Intro and Discussion
    - 15-20 minute activity designed to complement digital course in one class period
    - Optional extension activity
- Classroom Poster
- Digital Pledge
- Parent Letter
- Take home/Parent Materials

    Available next week in your Digital Citizenship Month Toolkit

- Supporting materials
    - Standards Alignment
    - Curriculum Guide

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Additional Resource

Factitious

http://factitious.augamestudio.com

correct!

That's right! That was a news article!
You won 41 points.

Source: foxnews.com

Fox News is a major cable news network.

As with other news networks, take care to distinguish news reporting from opinion. This story falls under news.

continue

Suspected Drunken Driver Runs Back to Burning Car to Light Cigarette

A suspected drunken driver went back to his burning car Sunday to try lighting his cigarette using the flames, according to the California Highway Patrol.

Amy Walker with the CHP says Robert Quigley, 25, rear-ended an SUV that was stopped in traffic on westbound Interstate 80 just west of Antelope Road. At the time of the crash, Quigley was driving around 75 to 80 mph.

A CHP officer spotted the car after it burst into flames and turned around in traffic to help.

A witness told officials a shirtless Quigley went back to his burning car to light his cigarette, singeing part of his eyebrows off in the process, according to Walker. Quigley later told the officer at the scene, "Yeah I'm not afraid of fire. I deal with this kind of stuff all the time."

Walker says Quigley sustained a burn on his neck from his seatbelt. No one else was injured in the crash.

81
round 1

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Digital Citizenship Month - #DigCitCommit

Inclusive

I am open to hearing and respectfully recognizing multiple viewpoints and I engage with others online with respect and empathy.

Lesson 1:
Connections and Community

Informed

I evaluate the accuracy, perspective, and validity of digital media and social posts.

Lesson 5:
Rights and Literacy

Engaged

I use technology and digital channels for civic engagement, to solve problems and be a force for good in both physical and virtual communities.

Lesson 6:
Evaluating Content

Balanced

I make informed decisions about how to prioritize my time and activities online and off.

Lesson 3:
Screen Time Vs. Offline Time

Alert

I am aware of my online actions, and know how to be safe and create safe spaces for others online.

Lesson 2: Safety and Privacy and
Lesson 4: Technology and Data

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Next Steps

Learn

Visit **everfi.com/ k12-courses**

Use **everfi.com/ k12-calendars** to plan ahead.

Try

Register for an account at **www.everfi.com/ newteacher**

Try a new course. You can add from your teacher dashboard.

Share

Share with colleagues.

Share about your class on social media - tag @EVERFIk12 and/or use #EVERFIempowers

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