

Social Change Dialogues

Meeting Them Where They Are: Designing an App for Early Adolescents' Healthy Social Media Use

Co-sponsored by Computer Science

Presented by Linda Charmaraman, Ph.D.

Catherine Delcourt, Ph.D.

Ashley Kim '19, Cynthia Serrano Najera '21, and
Payton Vandergriff '21

October 3 \ 1:00 - 2:00 p.m.

Room 413, Lulu

More: wcwonline.org/calendar

Accessibility and Disability Resources : accessibility@wellesley.edu



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Who are we?

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Centers for
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Youth, Media, &
Wellbeing
Research Lab



Computer Science
Department

Dr. Linda Charmaraman (WCW)

Dr. Catherine Delcourt (CS)

Ashley Kim '19 (MAS)

Cynthia Serrano Najera '21 (CS)

Payton Vandergriff '22 (MAS)

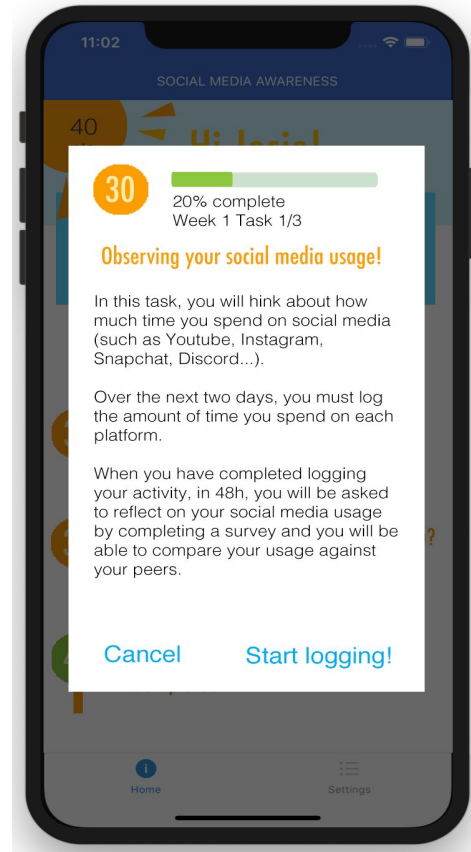
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How did this all begin?



App Prototype

- Cross-platform?
- Authentication?
- Data storage?
- Engineering resources?





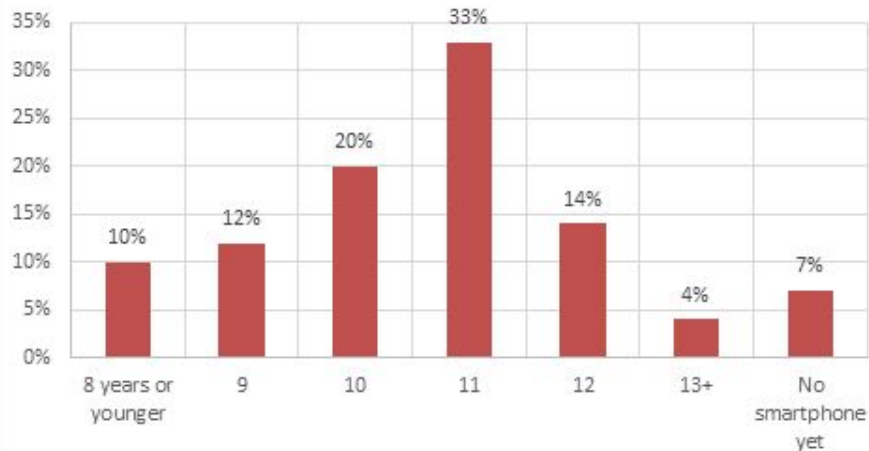
NOTHING IS IMPOSSIBLE.
THE WORD ITSELF SAYS
"I'M POSSIBLE!"

-AUDREY HEPBURN

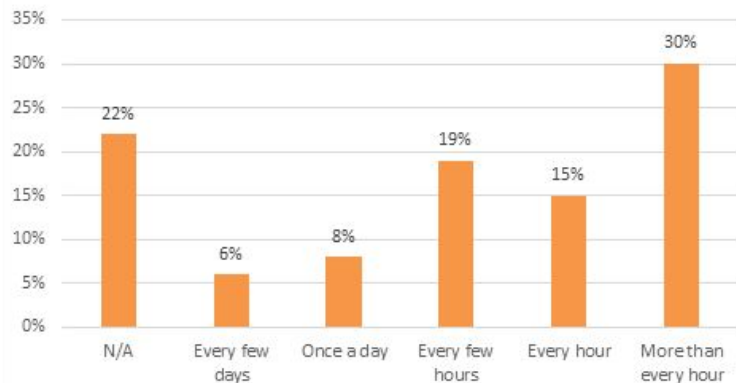


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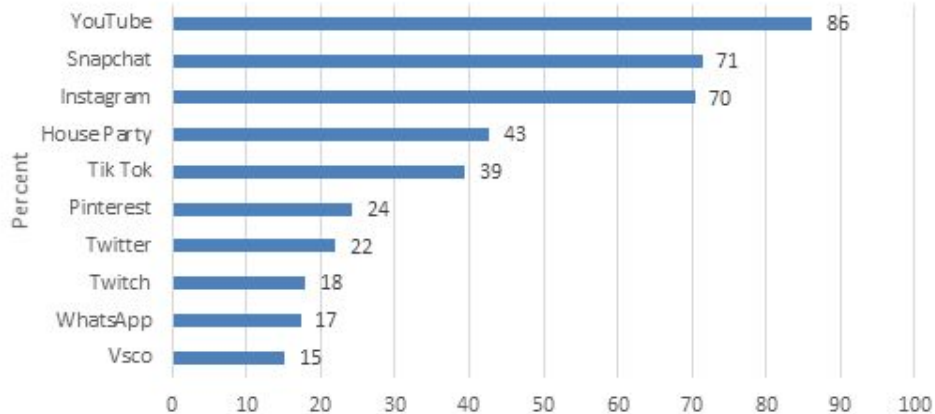
Age at first smartphone initiation



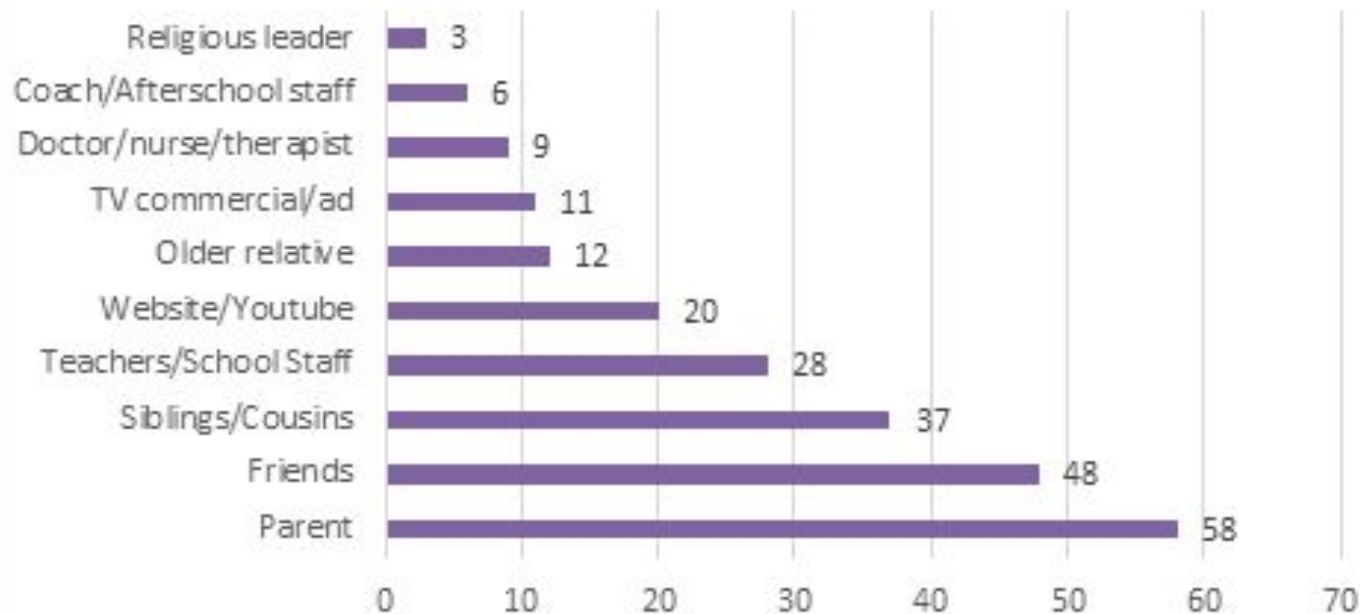
Frequency of checking social media



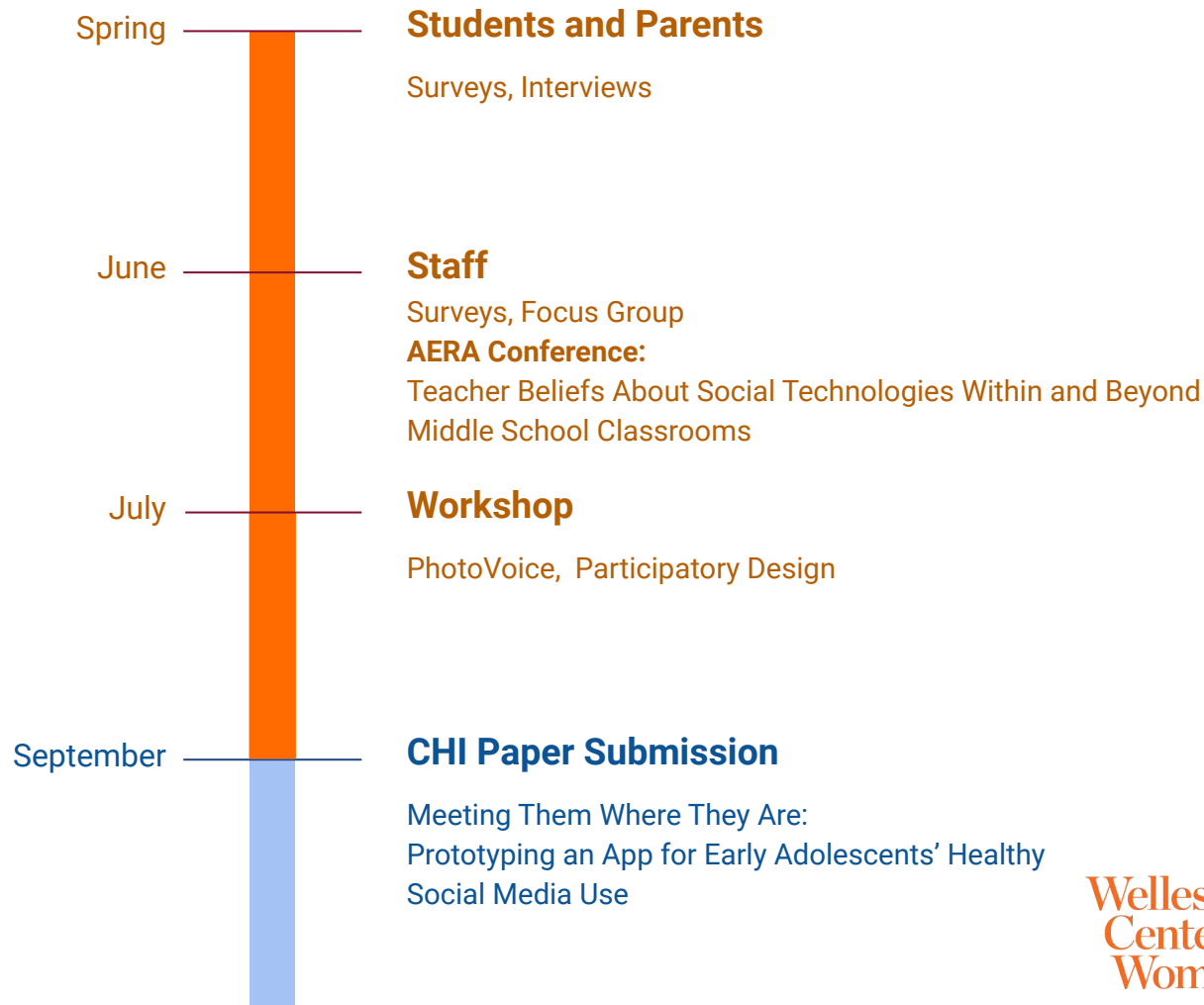
Top 10 Social Media Sites Joined



How did you learn about social media (what to do and not do)?

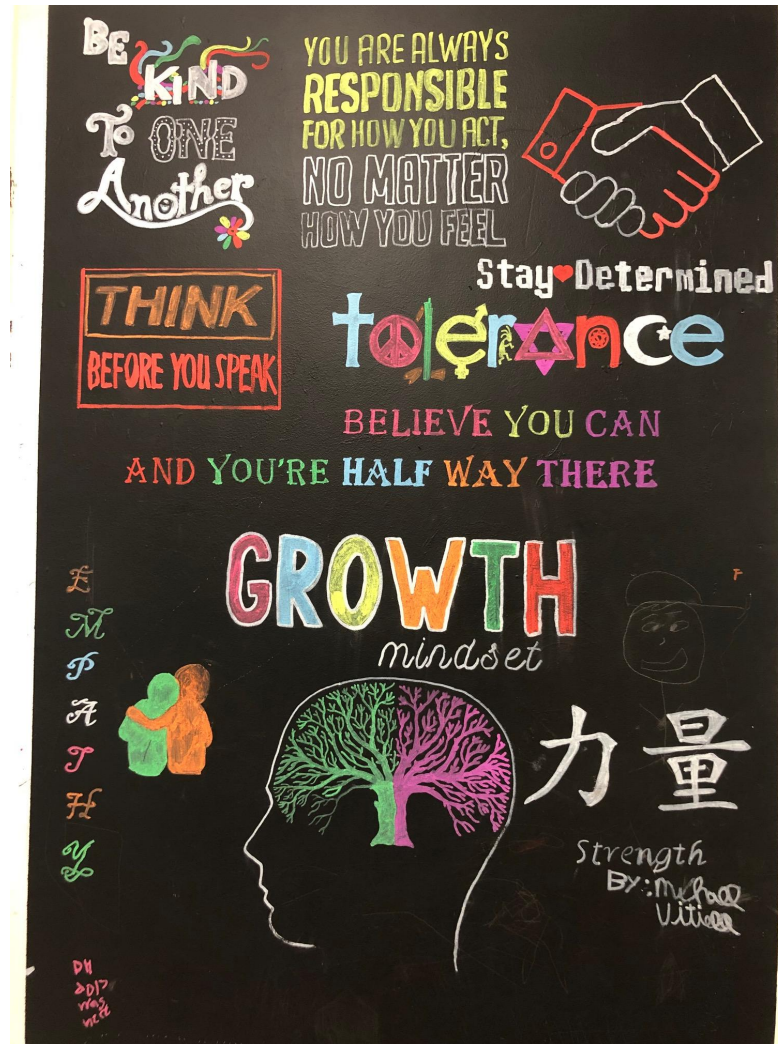


Timeline



Pre-workshop Setup

- Support from principal and school facilities
- Focus groups with school counselors and STEM teachers
- Obtained parental consent, media releases
- Planned curriculum and evaluation plan



Student experiences

How would you feel if you lost access to internet or social media for one day?

I wouldn't really mind. If it were YouTube I would be really upset

How about one week?

I would probably be a little upset.

How about two weeks?

I would be more upset. Probably be really upset because I can't talk to my friends.

What if you lost it for 2 weeks?

I'd probably go crazy.

[Laugh] Yeah, how difficult is it to imagine a life without internet for 2 weeks?

Honestly tough because you basically need it for everything, like just to even call someone, just like see time—well, no, there's clocks.

How would you feel if you lost access to internet/social media for one day?

Upset because I can't even last an hour.

How about one week?

No. couldn't do it.

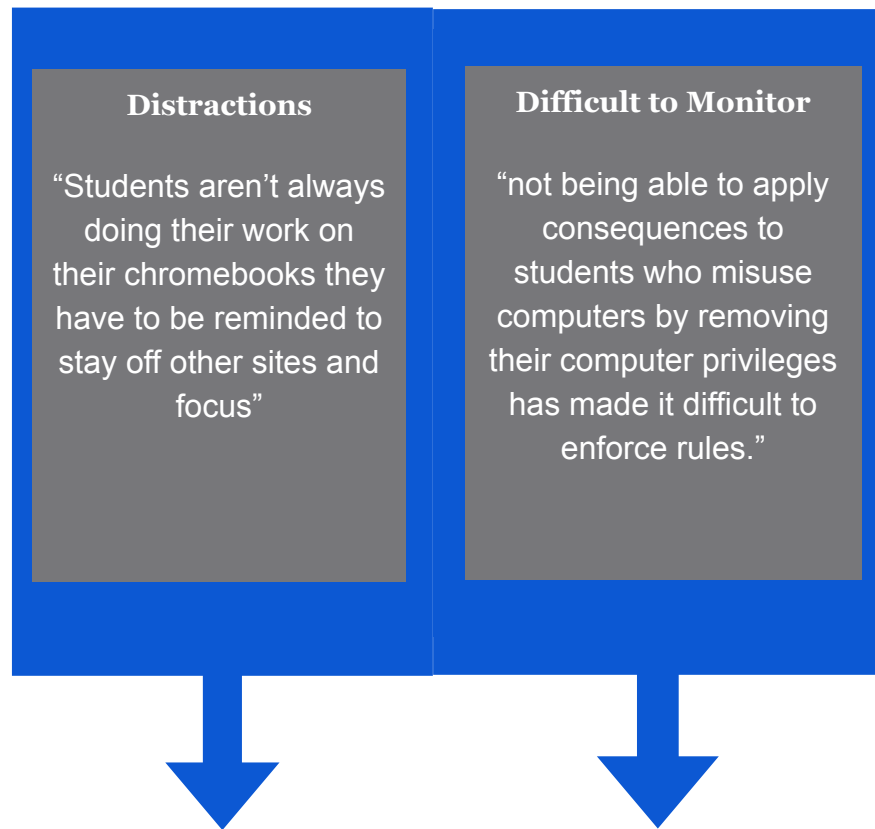
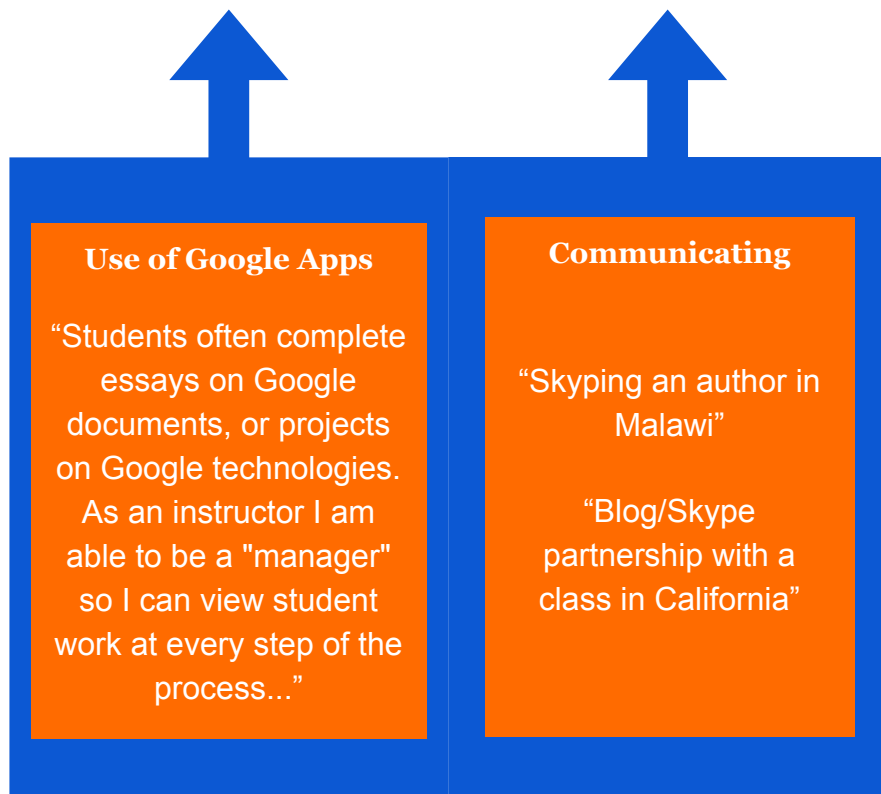
Okay. How would you feel if you lost access to internet or social media sites for one day?

I wouldn't really be mad, but the thing is, my streaks... I just always lose them.

What about longer, like one week or 2 weeks?

I wouldn't really be mad, as long as I have people to talk to, I'm good.

Staff experiences



Pre-workshop setup

01	FOMO & Screen Addiction	How long can you go without your phone? Take a social media break How does the Internet work? Paper Prototyping
02	Mental Wellbeing, Online Triggers & Social Support	What does depression or social isolation feel, look, or act like? Discussion of online video watching InVision Prototyping
03	Personal Profiles, Identity & Social Change	Health and wellbeing (sleep) Privacy discussion Social System Prototyping
04	Putting it all together!	Intro to web development Project pitch Final videos

What is PhotoVoice?

Photovoice is a process by which people can identify, represent, and enhance their community through a specific photographic technique.

PhotoVoice

- ❖ **Photovoice** is a research method that enables people to define for themselves and others, including policy makers, what is worth remembering and what needs to be changed
- ❖ Taking photographs or videos of familiar scenes and people can change participants' perceptions about their social and physical environment

1 To enable people to record and reflect their community strengths and concerns.

2 To promote critical dialogue and knowledge about important issues through large and small group discussions of photographs.

3 To reach policy makers and encourage the adoption of health promoting policies.



What we see here is a regular cigar wrapper on the ground by a boat loading dock in one of our lake communities right here in Ringwood. In a simple community it goes by as just garbage but in another light this is a sign of a blunt that was just freshly smoked on that landing dock. Surrounded by homes and others going unnoticed there is drug use right outside their door and more frequently than acknowledged.

Maybe just by being more aware and opening our eyes to what is really going on we may be able to prevent things from getting out of hand.



What we see here is just a pair of shoes hanging from the power lines.

To most it seems like it was just some kids fooling around throwing shoes up there but in reality in a town that has had a rising drug issue, it may be a dealing spot. In certain areas that is a clear sign that "Drugs Can Be Bought Here" but for a quiet town it looks like an innocent act. Going behind a few of the buildings in popular shopping areas you can see more of these shoes hanging and that seems to be a sign that the tradition may be growing.

Day 1 Photovoice Challenge: FOMO



- What do you see in the following photos?
- How are they a mirror into your own life?
- How are they a window into someone else's life?
- How is it related to FOMO?



*When we are not using technology we
can hang out with friends and family.
We can be more connected*

Hanging
outside of
tech



This is me at my

aunts farm in

Brazil. My aunt

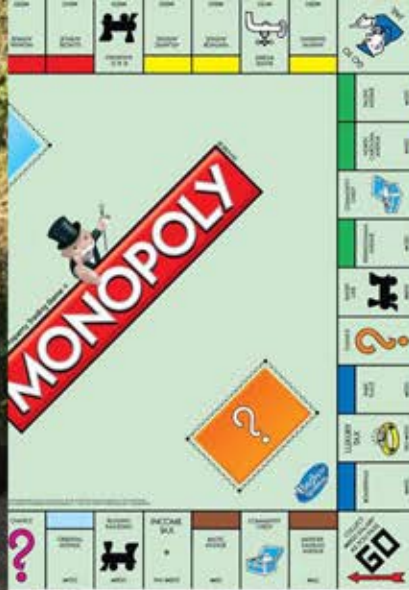
has a lot of dogs

and one of her

dogs had puppies.

This is one of

them, Popcorn!



This is me and my
friend, Rafaela.
She is also
Brazilian. We
went skiing
together and I
had a lot of fun!

JOMO
JOY OF MISSING OUT.

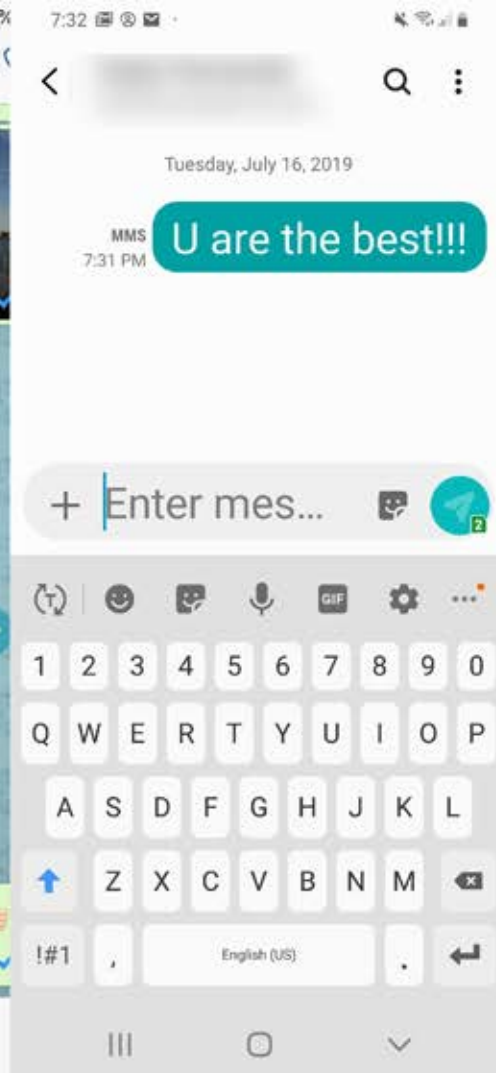
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Photovoice Day 2

In what ways can
you provide
social support or
boost someone's
wellbeing on
social media?



In what ways
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provide social
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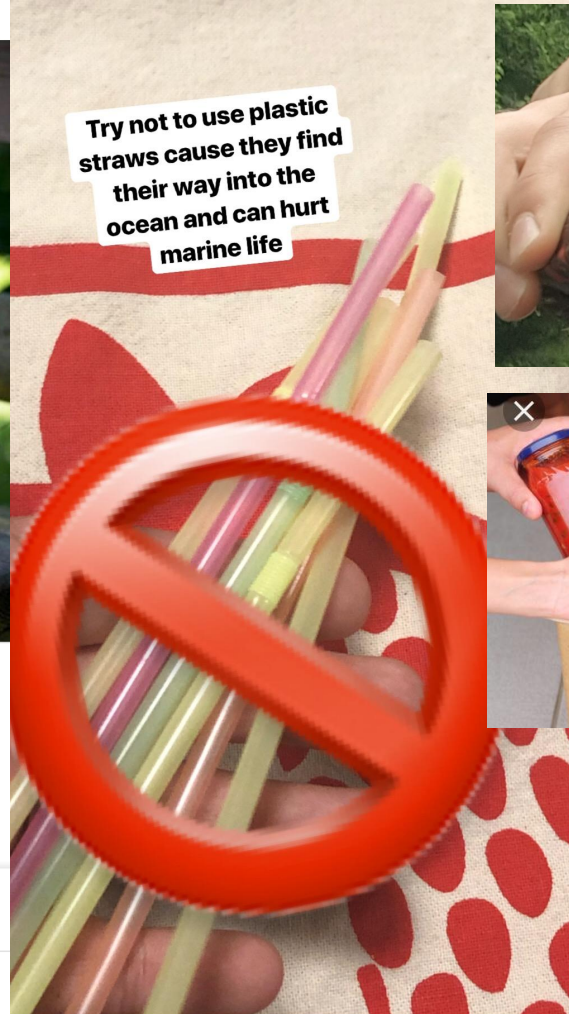
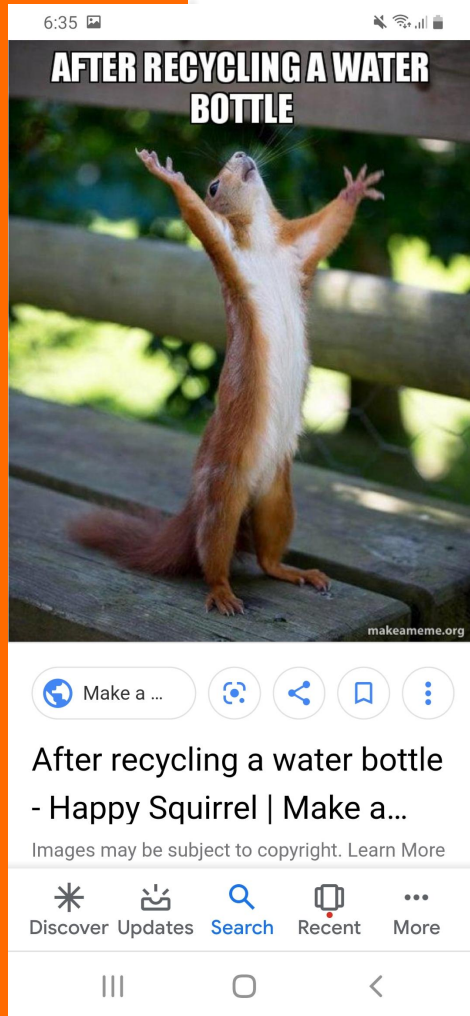
*me if i hear you
negative self-talking*

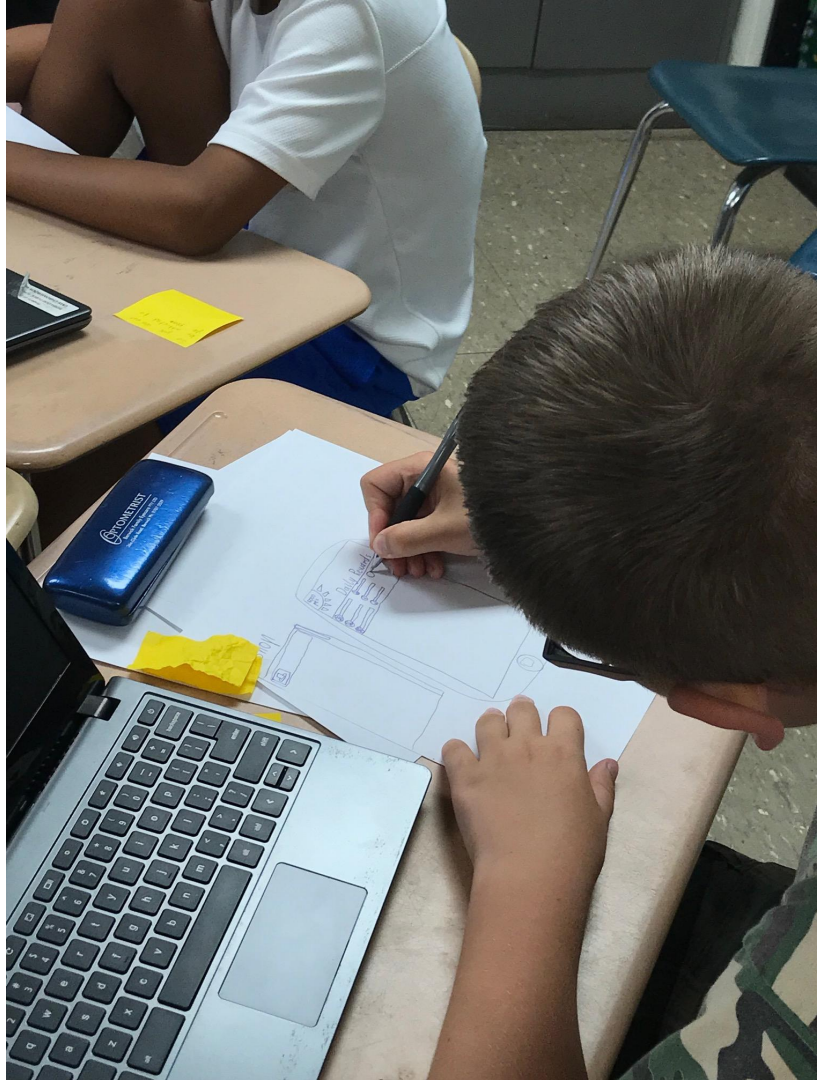


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Photovoice Day 3

How will you
make a
positive
difference in
this world?

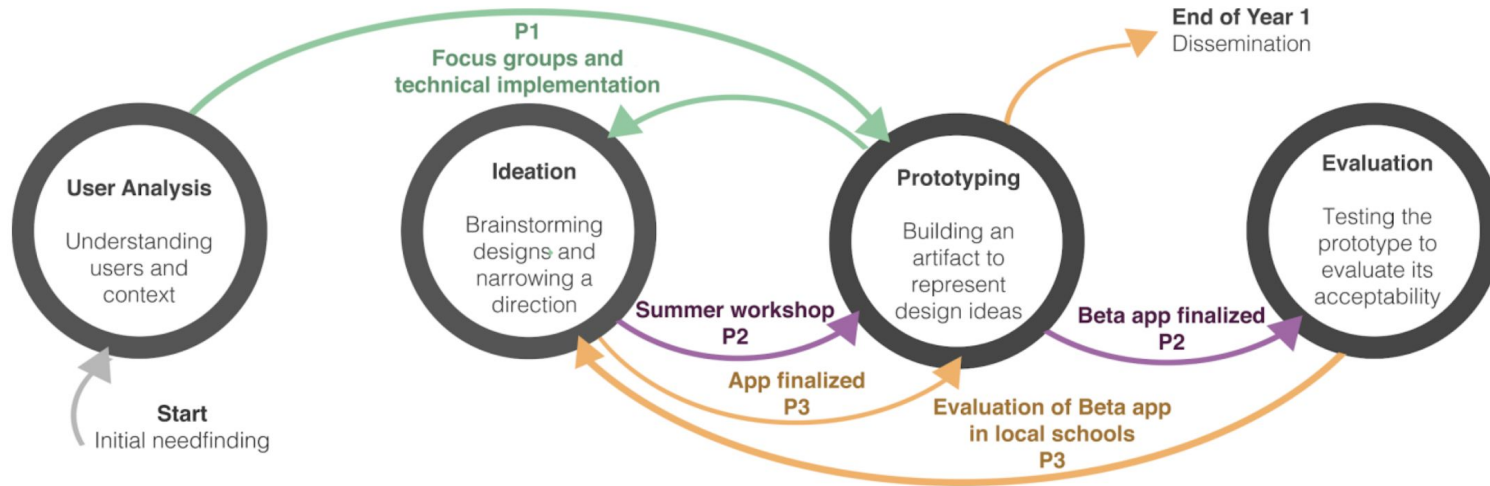




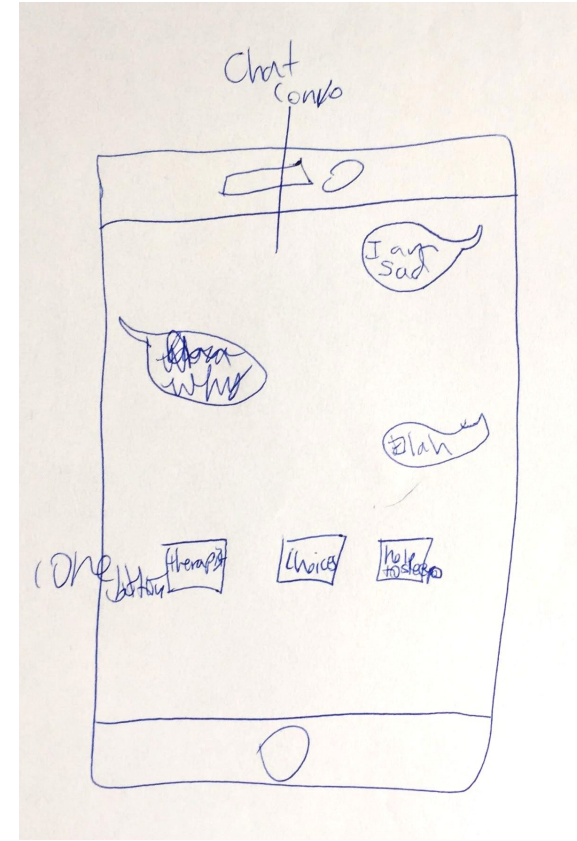
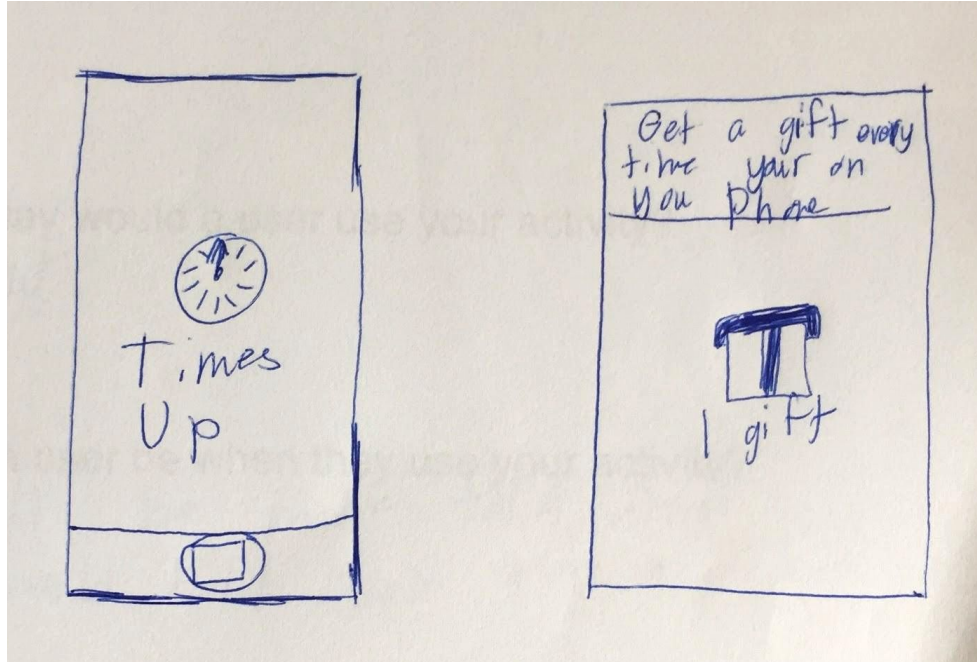
Prototyping

Prototyping & Participatory Design

End-users are involved in the technology design process.
Iterative process increasing sophistication every time.



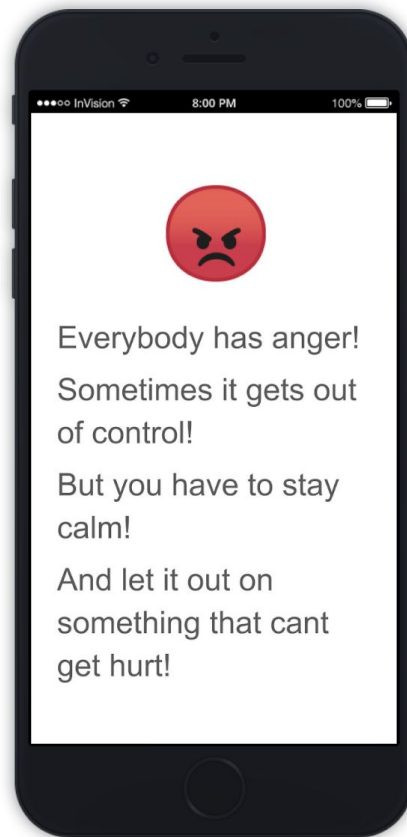
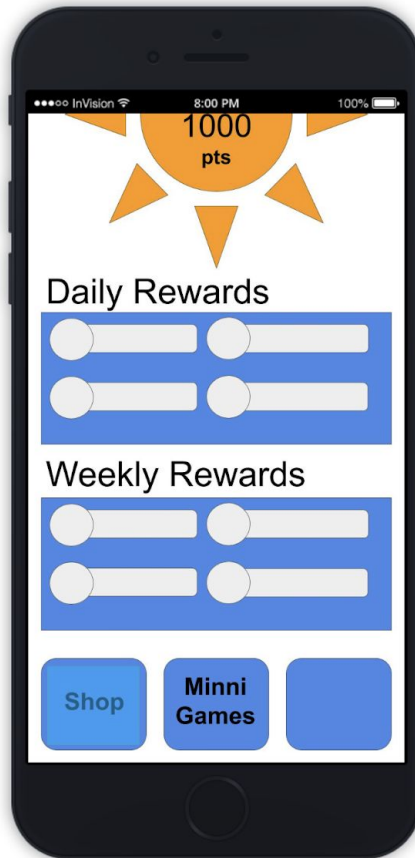
Paper Prototyping Examples



InVision prototypes



invisionapp.com



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Profile Builder prototypes

Profile Preview

Username

sports

hobbies

pets

siblings

nickname

age

How you are called

☐ Real identity

☒ Username

☐ Anonymous

About yourself

What you like

sports X

hobbies X

pets X

siblings X

nickname X

age X

Add


Profile
Builder
Toolbar

Usability comparison of prototypes

	How satisfied were you with what you created using the following tools...	How easy or difficult did you find each of these prototyping tools?
Paper Prototypes	5.09	5.64
InVision	4.91	4.09
Profile Builder	5.45	5.18

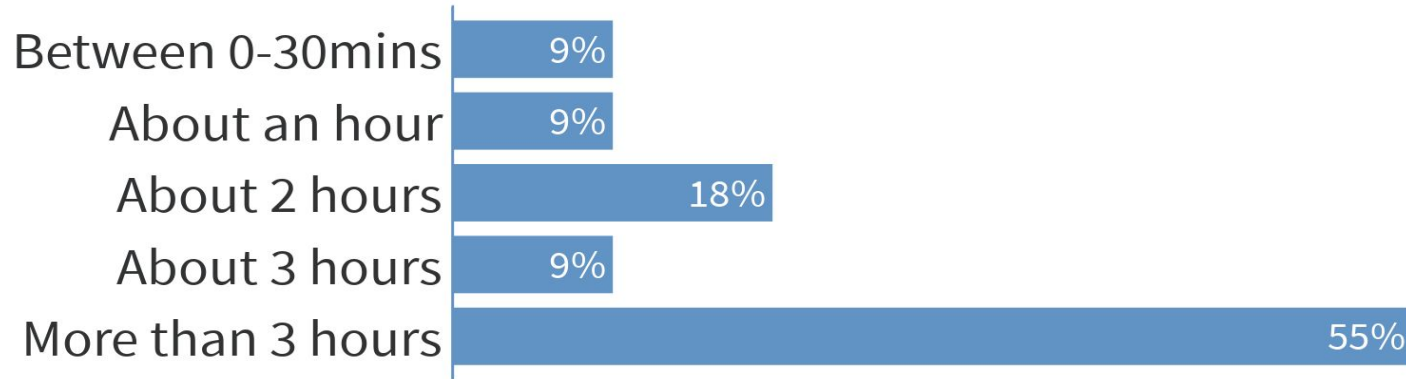
Video Consumption Patterns

Why Study Youth Video Consumption Patterns?

- Summer at  Emerging Platforms team
 - Increased access to digital devices, platforms, and social media sites among early adolescents
 - On-device (video-watching) experience: individual or group/collective/shared?
 - Depends on: Content? Device? Family and/or school culture? Friend groups? Age?
- In-class PollEverywhere: 11 students participated in the interactive poll session.
 - Time spent online, choice of platform, with whom they watch with, feelings and motivations.

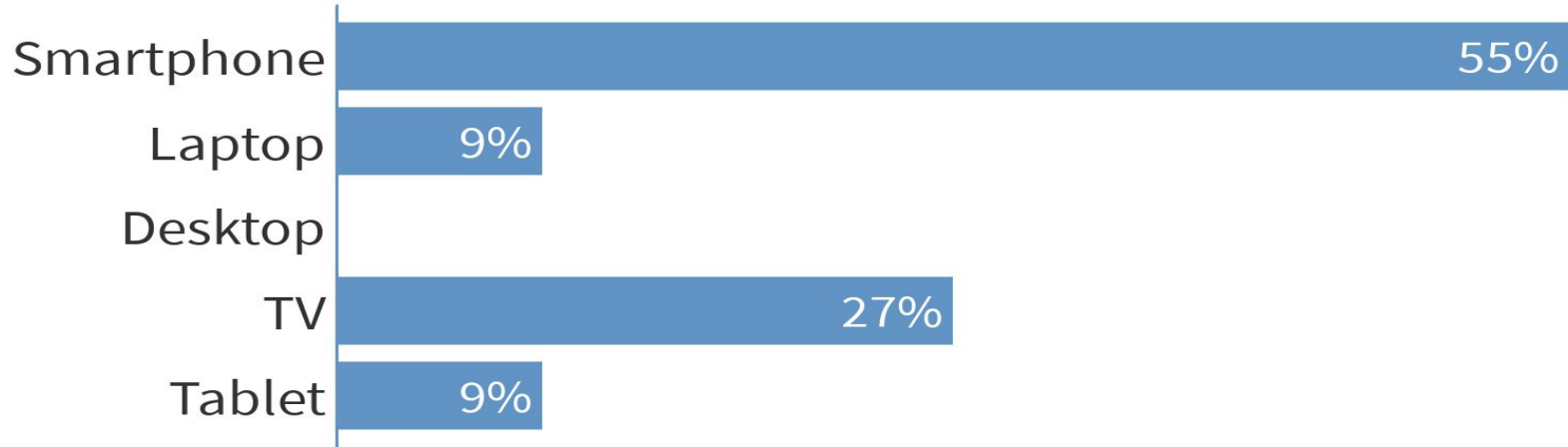
In-Class Polls #1

How much time do you spend watching videos online everyday?



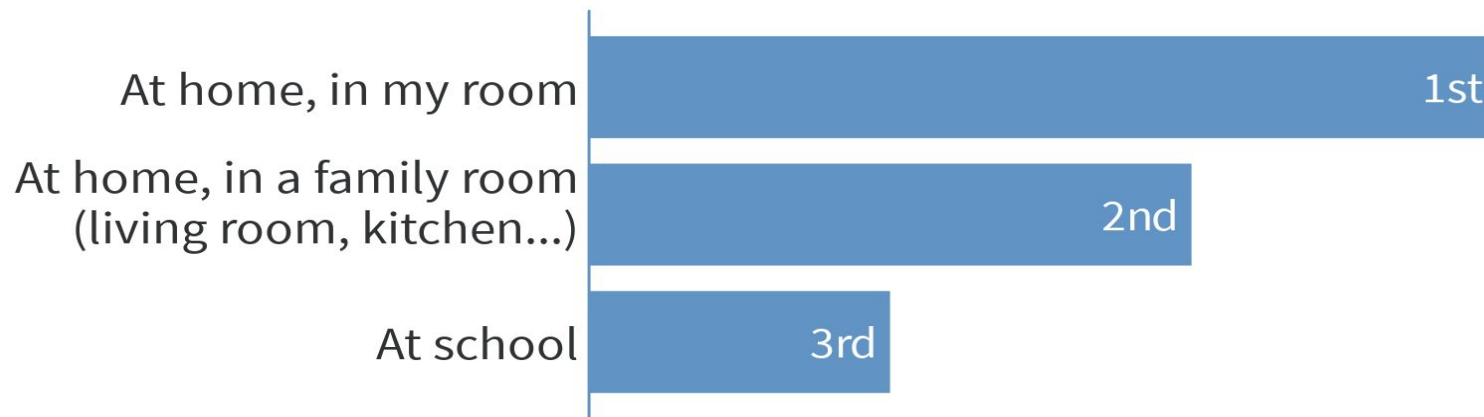
In-Class Polls #2

What device do you use to view videos?



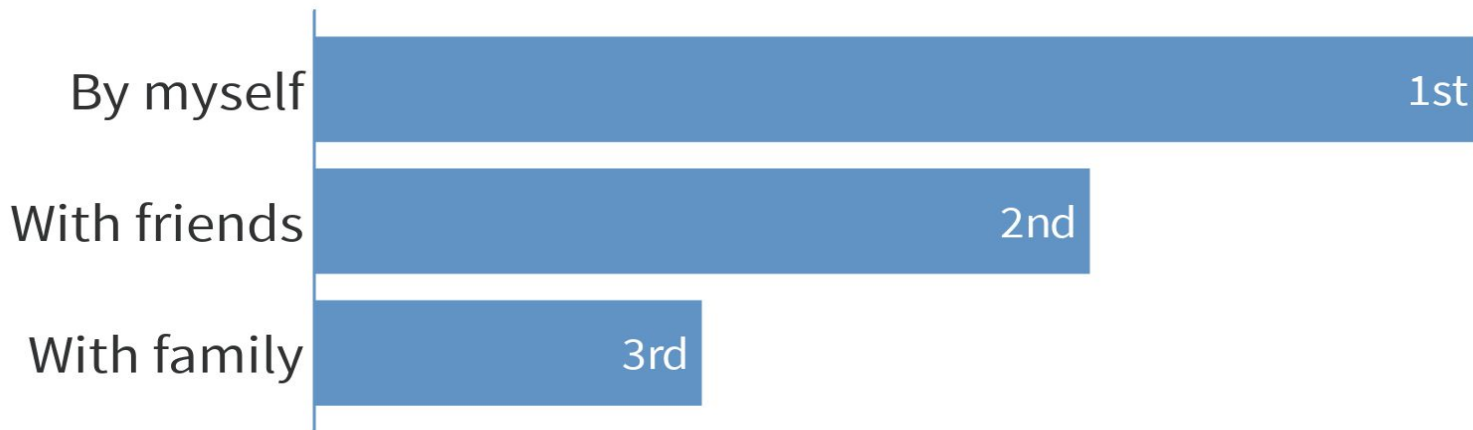
In-Class Polls #3

Where do you watch online videos? Order them from most to least.



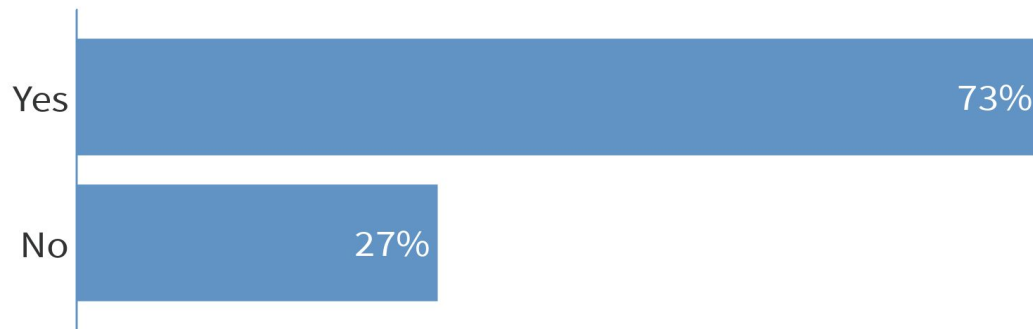
In-Class Polls #4

Who do you watch online videos with? Order them from most to least.



In-Class Polls #5

Do you talk about what you watch with friends and family?



Do your friends and family know what you watch?



Word Clouds

What is your main motivation for watching videos online?



Word Clouds

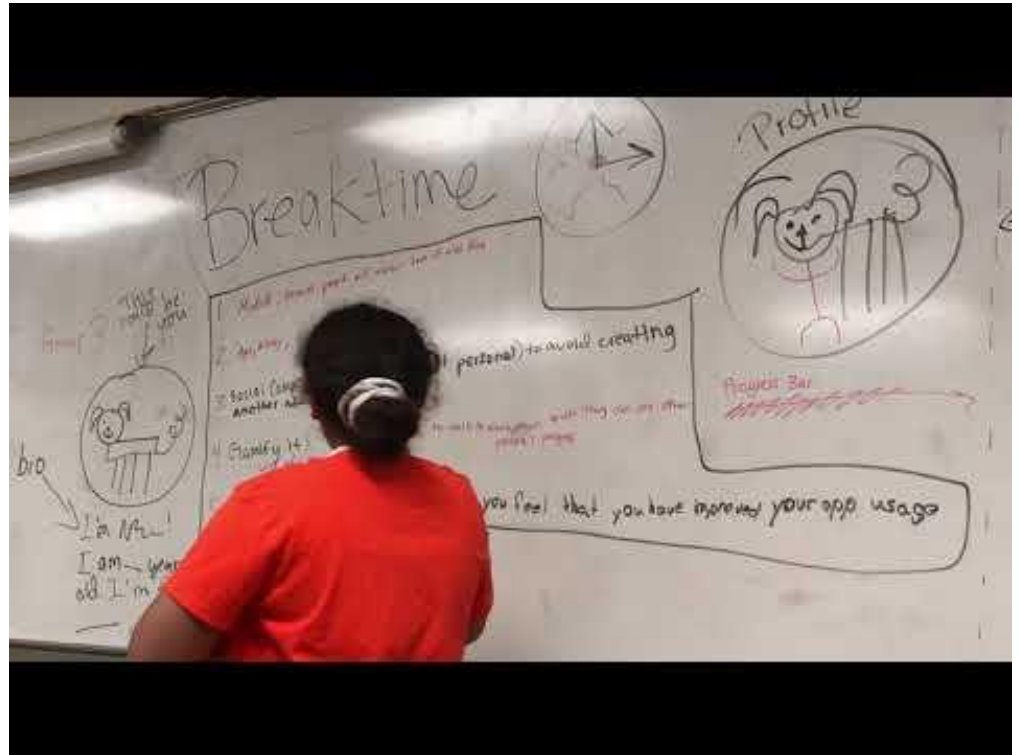
Describe your feelings when you watch online videos...



Questions to Explore

- Boredom & Guilt → **sense of time** among teenagers?
 - 55% of students watch videos 3+ hours daily.
- Role of family: Use of smartphones / digital devices at home
 - Watching alone (1st), With friends (2nd), With family (3rd).
 - “At home in my room” (1st)
 - Different content / shows depending on whom students watch with.
 - Teenagers: “It's the last time that a whole population is entering a new social group all at once.”
- McCulloh, *Because Internet*
- Hard to distinguish what is “video” content today
 - → What do we count as strictly “videos” vs. “social media” embedded video content?
 - Streaming: Netflix, YouTube, HBO, Hulu (VS.)
 - Social media platforms like Facebook, Instagram, Snapchat, TikTok, etc

Outcomes





Outcomes

“I learned that most kids are addicted to their phones and there are ways to like stop being addicted.”

“I learned about fear of missing out and how to not be alone.”

“I learned that a lot of people will treat people different, but even though they are different we are all the same.”

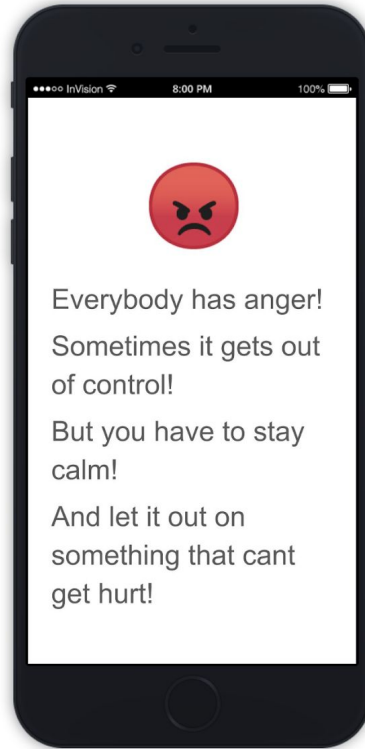
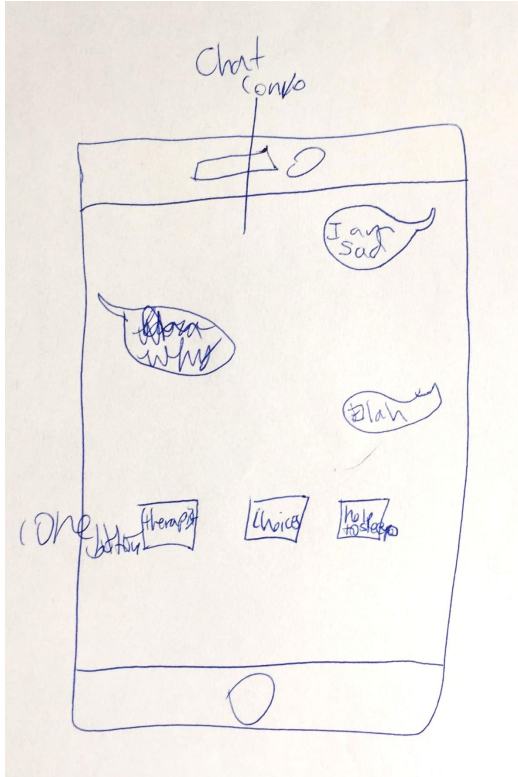


Outcomes

Participants overall had a positive experience:

- 100% might use aspects of this workshop in class projects
- 90% would be interested in a follow-up workshop
- 80% would be likely to talk to their families about this workshop

Outcomes: Comparing prototyping techniques with middle school students



Username	<input type="text"/>
sports	<input type="text" value="Cheerleading,basketball"/>
hobbies	<input type="text"/>
pets	<input type="text" value="three dogs"/>
siblings	<input type="text" value="one sister and one brother"/>
nickname	<input type="text" value=""/>
age	<input type="text" value="12"/>

Outcomes: Insights for teachers to discuss social media with students.

Privacy

We found some confusion in what was meant by the public profile vs the private profile. Suggesting that their interpretation of a private profile is the one with the most minimal amount of information.

Students had knowledge about technical terminology (bits, code) and practical knowledge of utilizing web services (sending email, making slides, etc). But gaps in how these concepts relate.

STEM concepts

Role of parents/family

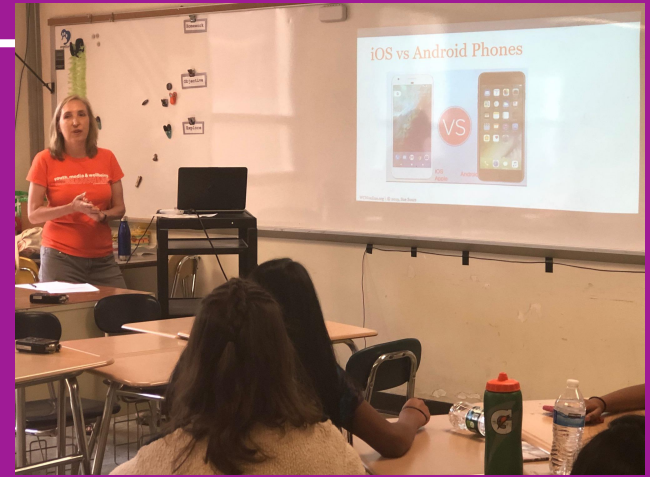
We saw that their family is a core part of who they identify with and how they identify themselves. Amongst the girls, 4/6 had a section devoted to listing their siblings.

Future directions

Future directions



- Looking for funding, school and community partners
- Test with different populations and communities (e.g., first generation, girls of color, etc.)
- Design and develop the App through an iterative process
- Develop curriculum for out-of-school time
- Process evaluation and feasibility to expand
- Create college student mentoring program with teens to develop STEM aspirations



Special thanks to Dr. Philip O. Coakley
Middle School, Principal Fraczek, and the
staff and families who trusted us with this
pilot workshop.

Many thanks to our project coordinator Alyssa
Gramajo, Sue Sours, Josie Ku, Anna
Adachi-Mejia, I Am Strong Foundation, NIH,
and Wellesley College summer internship
programs.

Questions?

www.youthmediawellbeing.org

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