# Using media resources to create transformative change in mobile device use by ninth grade high school students

*By Ariel Dagan*

## Snapshot

Dagan describes the ten lesson unit of study that received the first Carolyn Markuson School Library Innovation Grant Award from the **New England School Library Association**. This unit of study supports learners to be better aware of the various impacts their mobile device has on their health and assists them to reflect on how they engage with their mobile devices.

In this article you will read about the collaboration between a high school Library Media Specialist and the Health instructors of the school. The goal was to design a new unit of study which will be rich with diverse media resources and activities that will help the learner be better aware of the various health impacts their mobile device has on their health. During the 10 lesson unit not only did students become aware, but also demonstrated behavioral changes that were the direct result of interactions with the lesson design.

> In health education, especially at the high school level, our goal is to educate students to be the best versions of themselves. To make decisions that fit their lives now but also their future selves, health does not go away upon graduation, but is lifelong learning. Mr. Dagan's Mobile Addiction Unit does exactly that. Students are able to self-assess and start to think about their own behaviors and changes they can make. Students might not be ready to make changes now but the unit teaches them how to make changes when they are ready. Mr. Dagan encourages students to make small changes, to become aware of usage and to understand facts to go along with their 'why are we learning this'. All of these things are critical in educating young adults, especially at a grade 9 level. - S. Caffrey Health & Physical Education Teacher.

As educators we might not be aware of the many ways a mobile device impacts the health of our mind, body, and soul. As educators we can have an impact on the physical and mental health of our students and help them connect with what they value most. To make this occur we should expose our students to a wide selection of media. We should provide them with a space to reflect independently and with their peers on what they are experiencing and what they learned from the resources and their own experiences. **The unit designed is meant to allow students to become accountable for how they wish to engage with their devices and what they wish to do with their unstructured time**.

You might be asking yourself, is it possible to implement a unit that creates transformational change in just 3 weeks? I will share some insights and examples from this unit that is now part of the health curriculum of our ninth grade class. The simulation, all activities and assignments, enable the students to realize they can create the changes they wish to experience for themselves each day.

# Background

This is my 9th year as a library media specialist at Tri County Regional Vocational Technical High School in Franklin, MA and my 30th year in the field of education. As a professional in the field of Library and Information Science I was seeing patterns of behaviors in students that were directly linked to their use of their mobile device. Last year I brought up some of these concerns with one of the health instructors and asked him if the physical and mental aspects of using mobile phones were covered in their curriculum? He mentioned that only texting and driving were covered as related to mobile phones and dopamine was addressed when learning about drugs. He thought having a unit which addresses the impact of mobile device use would be a great addition to their curriculum and agreed to pilot the program with his colleagues.

After conducting half a year of research on the issues at hand, I was ready to move forward with writing student SMART learning goals which were Specific and Strategic; Measurable; Action Oriented; Rigorous, Realistic, and Results-Focused; Timed and Tracked. It was important to me that the unit I was designing would fit in with the American Association of School Libraries shared foundations and standards framework to meet the desired outcome.

**Learning Standards for the 21st Century Learner -Think, Create, Share, Grow**

1. **Inquire, think** critically, and **gain** knowledge. (1.1 Skills, 1.2 Disposition in Action 1.3 Responsibilities 1.4 Self-Assessment Strategies)

2. **Draw** conclusions, **make** informed decisions, **apply** knowledge to new situations, and **create** new knowledge. (2.1 Skills, 2.2 Disposition in Action 2.3 Responsibilities 2.4 Self-Assessment Strategies)

3. **Share** knowledge and participate ethically and productively as members of our democratic society. (3.1 Skills, 3.2 Disposition in Action 3.3 Responsibilities 3.4 Self-Assessment Strategies)

4. **Pursue** personal and aesthetic and growth (4.1 Skills, 4.2 Disposition in Action 4.3 Responsibilities 4.4 Self-Assessment Strategies)

Skills- Abilities needed for **understanding**, learning, **thinking**, and mastering subjects.

Disposition in Action -Ongoing beliefs and attitudes that guide thinking and intellectual behavior that can be measured through actions taken.

Responsibilities – Common **behaviors** used by independent learners in **researching, investigating,** and **problem solving**.

Self-Assessment Strategies. **Reflections** on one's own learning to determine that the skills, dispositions, and responsibilities are effective.
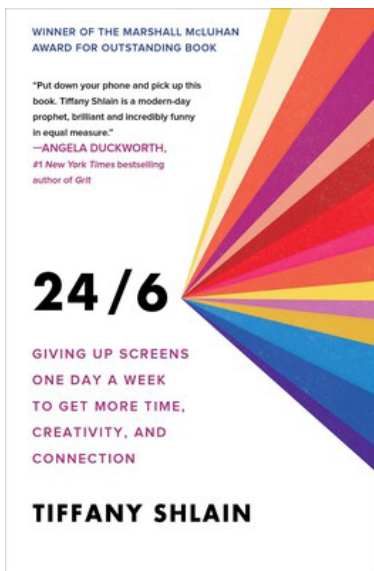
This unit has already benefited from a $500 grant from the **New England School Library Association** as part of the first Carolyn Markuson School Library Innovation Grant Award. Funds helped us secure some of the copies of **Tiffany Shlain's book** which are being read as part of media resources in the unit.

**Student Learning Goal**

In order to develop 9th grade students in Health class understanding of the use of their mobile device habit and addiction behaviors, students will participate in activities designed to help promote student's awareness of mobile addiction and create opportunities for behavioral change in student use of their mobile device. During this unit students will use various media sources, work individually and in groups, interview parents to attain historical information of growing up without mobile devices and record reflections related to their understanding of the impact of various uses of mobile phones on many aspects of their lives. The lessons will be built within Nearpod to allow flexibility in class activities and sync with Schoology and Google form.

**Student Objectives**

As part of the instructional plan the following essential questions were posed:

- Am I aware of the way my mobile cellular device impacts my state of being?

- Should I reevaluate certain apps running on my mobile cellular device?

- What safeguards can I put in place to prevent mobile cellular device addiction?

- What are productive ways I can utilize my mobile cellular device while avoiding addictive mobile cellular device behaviors?

- To what extent am I aware of the actions taken by me, on my mobile cellular device, has on others and on my long-term goals (vocational opportunities)?

As part of this learning unit, it was understood that students will be able to complete these academic skills:

- Evaluate the value of exercising self-control

- Plan health promoting strategies for managing personal technology use

- Understand the impact of mobile cellular device addiction on teens

- Identify triggers of addictive mobile cellular device use both while independently and in public

- Understand methods to avoid mobile cellular device addictive behavior

- Provide examples of productive and negative mobile cellular device use

- Provide written reflection of their thoughts and feelings about this topic
- Evaluate articles and other resources that can provide more resources regarding mobile cellular device addiction
- Conduct interviews and present findings of family members who went through their teen years without mobile cellular devices.

## Overview

Students need to understand that multiple factors may play a role in determining whether their mobile cellular device use habits are a sign of addictive behavior. While mobile device use is certainly individualized, students need to be made aware that patterns of use by the students and the applications being used may come into play as helpful determining factors of addictive tendencies. Today, many high school students own a mobile cellular device yet only a percentage of students are considered addicted. Supporting multimedia resources that are accessed by students throughout this unit clarifies how certain applications in our mobile cellular device may be influencing patterns of behavior that are addictive in nature. Students will be able to connect the fact that individuals who suffer from an addictive personality spend excessive time on a behavior or with an item, not as a hobby but because they feel they must. Addiction can be defined when the engagement in the activity or experience affects the person's quality of life in some way. Students will be able to connect the ideas of the lessons to their personal lives as freshmen students at Tri-County Regional Vocational Technical High School and with the identification and development of personal pursuits and interests in life.

> All of us are jacked into this system," he says. "All of our minds can be hijacked. Our choices are not as free as we think they are." Harris, who has been branded "the closest thing Silicon Valley has to a conscience", insists that billions of people have little choice over whether they use these now ubiquitous technologies, and are largely unaware of the invisible ways in which a small number of people in Silicon Valley are shaping their lives. A graduate of Stanford University, Harris studied under BJ Fogg, a behavioral psychologist revered in tech circles for mastering the ways technological design can be used to persuade people.  **Davis P. The Guardian 10/6/2017**

This unit further develops students' critical thinking surrounding mobile cellular device use. Students will synthesize their understanding with the teachers and discuss if their opinion has changed by the end of the unit.  The objective is for students to understand that the devices they have are designed in ways that can cause addiction.  Students will use this understanding to help them make choices and plans for the future that are both meaningful and motivational for students and build their choice.

## Game plan

**Lesson 1:**
Since the unit has high expectations regarding student input, it was important to begin setting expectations with regards to the type of activities that students will be engaged in and making sure they follow through. Students receive in this lesson evaluation rubrics.

This lesson requires students to engage in: active listening, writing, reporting (sharing), time management. Students are provided the opportunity to become journalists and extract details from their partners on ways they interact with their mobile device. This is an open question but restricted by interview time.

Within the entire unit there are many **purposeful activities** that are meant to allow the students to experience activities they may not do while being on their mobile device. This initial activity enforces direct eye to eye contact and engages in conversation with someone you may not know details about them.

The class moves from partner activity to listening to what they have in common (with students that chose to share with the class at large) and being able to see how things they do are also done by others. This is important to prepare them for understanding how to view and analyze the Pew Research they will soon access.

The next activity allows students to work as a group with regards to statements written on the board and debate their view of agreeing and disagreeing with the statements. The focus of the statements is with regards to their relationship with their mobile device. Who may be the slave and master of their device.

Pew Research **resources** highlighted to students in this lesson provide them the opportunity to observe and evaluate societal patterns with regards to Mobile Phones as well as Social Media use.

In this initial lesson it is important to begin assessing where students see themselves. Students will be taking the mobile cellular device evaluation to place a marker point on their use. There are 16 yes/no replies and two additional questions that ask: What are the 3 primary benefits you get out of using your mobile cellular device? (label your answer with numbers 1, 2, 3 before each reply)

What are the 3 ways in which your mobile cellular device has a negative effect on you?(label your answer with numbers 1, 2, 3 before each reply)

Another media the students will be shown prior to the end of class has no words, only actions. The clip is pretty powerful as it emphasizes ways in which mobile use is impacting daily life and creating missed opportunities to be fully engaged in the moment.

## Takeaways

For homework students are provided their first reflection. Its ultimate goal is to provide a venue for student reflection by connecting with the material we are covering and for students to read what their classmates think. As an assignment, they are also commenting on at least two other students.

As previously mentioned, another media being used is the book 24/6 by Tiffany Shlain. For homework students are broken down into three groups to read part 1 of the book "A Day Different from All Other Days". Each group reads a chapter and shares their thoughts on the discussion board. Students learn from the other students about the two chapters they have not read and comment on it.

Again, with the homework assignments there is also a goal of having the students spend time reading the book to keep them off their devices for a longer part of their ordinary day.

The link will provide you a preview of the activities in the Nearpod lesson #1/10. **https://app.nearpod.com/?pin=16F96E63DBFE19F7FE10ED5533A9B6BF-1**

**Lesson 2:**
One of the primary focuses of this session will be making sure students have no access to their mobile device.  We will track to see if while watching two short clips students feel a desire to access their phone through a form that they will receive.

| Video # | Place to put check marks | Place to write down the emotions you are feeling |
|---------|--------------------------|--------------------------------------------------|
|         |                          |                                                  |

The second class will have students accessing Barbra Jennings Ted Talk as part of the preparation in tomorrow's class where they have the opportunity to accept Barbara's challenge and fill in the first of two forms they will use to keep track of their daily use.

The Barbara Jennings Challenge: I predict that the longest time I can be physically without my cell phone to be: _____

Put your cell phone out of your physical location for an hour a day.
For one hour a day be without your cell phone.

Focus on something else. (your surroundings, the people around you, gaze at the beautiful skies, etc

| Date | Today I was able to put my cell phone away for this amount of time: | During the time period that I was physically without my cell found I was able to do and focus on the following things: |
|------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|      |                                                                     |                                                                                                                        |

The other clip students will watch is This Panda is Dancing. Again, aside from watching the video the students may react in the form to what they feel while watching the video.

Students will here today from Tristan Harris and choose to reflect on one of two New York Time news articles where Harris is mentioned.

## Takeaways

For homework students are writing their second reflection which is mostly focused on looking at the progress of change.

Empowering student voice:

In the lesson design process it was important to find the right balance between facilitated exposure of media resources and allowing students to express their thoughts with as many voices being heard in a large class. In this unit it is essential that students are aware of what other people in their age group are experiencing, feeling, and what they think about certain topics. One way to make that occur in an efficient and moderated way was to have students engage in the discussion boards that require students to provide feedback to no less than 2 students. The prompts to these discussion boards were designed to occur at time at the start of class and at other times at the end of the session as part of homework.

Here are some of the 17 discussion prompts students are sharing their reflections with one another:

| Lesson # | Title and Location of discussion board in lesson | Prompt |
|---|---|---|
| 1 | #1-Typical Day (Homework) | Describe your typical day on your mobile cellular device from the moment you first use it in the morning (when you wake up) and until you last use it at night (when you are asleep). Describe in as much detail the types of activities and applications used. Have there been times that using this activity has frustrated you or has been difficult? Share an example when you have used the device and it has been rewarding? Write as much as you can about this activity but limit your writing to 5 paragraphs. Remember to comment on reflection entries of other students |

| 2 | #2 Your Tristan Harris article reflection and amount of power (Homework) | Start off by typing the title of the article you chose to read in the article. |
|---|---|---|
| | | Share some key points the article makes. |
| | | Reflect on yesterday's questions in the evaluation and your prediction of how much control you felt you had over their mobile cell device use. |
| | | In other words, how aware are you of how much you use your device? |
| | | Were you surprised at the frequency with which you found yourself wanting to reach for your mobile cell device during the videos? |
| | | Write as much as you can about the article and prompt but it should be at least 3 paragraphs. |
| | | Remember to comment on at least 2 reflection entries of other students |
| 2 | #3 Do one thing different (Homework) | What is one thing you could do between now and next class to curb your mobile cell device use, as it relates to the negative affects you identified? |
| | | Between now and next class, I want you to try and do that one thing. |
| | | Write down how likely do you think you'll succeed at that one thing and why do you think this way? (Scale of 1 to 7 from Not at all – very likely) |
| | | Write as much as you can but it should be at least 2 paragraphs. |
| | | Remember to comment on at least 2 reflection entries of other students |
| 3 | #4 Initial Effort (start of session) | Write down if you were successful in creating the change you wrote about. If you were successful, what do you believe helped? If you were unable to make this change, what stood in the way of making this one change? Explain in as much detail as you can. |
| | | Write no less than 2 paragraphs. |
| | | Remember to comment on journal entries of other students. |

| 3 | #5 Making good choices ( Homework) | Our mobile cellular devices provide conveniences, experiences and ways to control many factors of our lives. In this reflection describe some of the conveniences, experiences and ways you are in control of your mobile cellular device. Consider whether you use your devices intentionally and were in control, or whether you allow your device to dictate the terms. To help you answer this prompt, think of what you post when you post it and what may have triggered you to create the post.<br><br>Write as much as you can but no less than 2 paragraphs. Remember to comment on entries of at least 2 students. |
|---|---|---|

## Survey and Polling

Within the unit students are asked to participate in 5 surveys. The goal of these surveys is to get a sense of where a student is at with their view (at the specific point in time of the learning) and also to be able to show students where the class is at in their view as a collective.

In lesson 3 3 for example after students take the survey summary results are shared with class to show students how the group answered the question.

Students are always provided instructions such as: Mobile Cellular Device Usage Survey-Fill out the following survey to the best of your ability. Read questions completely and answer questions to the best of your knowledge.

For example:
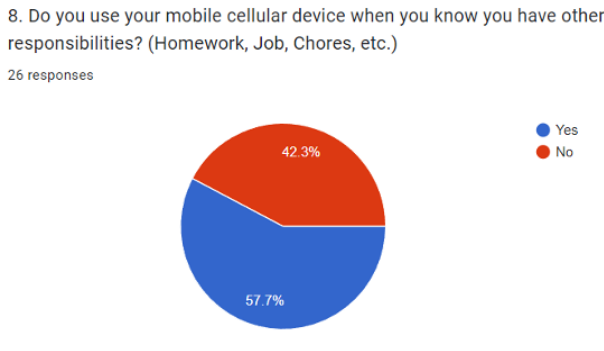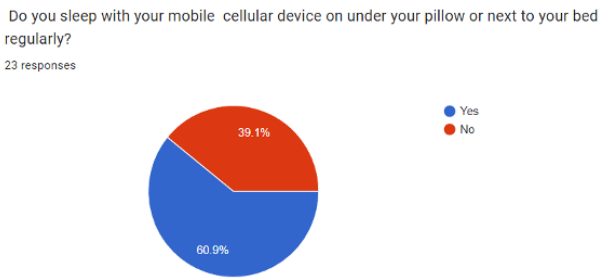


3. What ideas do you have that could help people reduce their mobile cellular device usage?

The goals are to present the information to students as a group and also to capture student's responses as individuals at a certain point in time in their learning process.

## Worksheets

The reason worksheets are being distributed to students is to enforce feedback and keeping track off the phone. For the most part the sheets stay home with students for the duration of the unit and they turn them in in the last class to show what progress they have made since they took the challenge.

Here are a couple of examples: **16091**, **16200**

## Intergenerational conversations

Most of the students who are interacting with this study unit were born the same year that the Iphone first hit the market (2007).  These children grew up in homes with cellular devices used by their parents. It is for this reason as well as others that it is essential that students have an understanding of life as a teenager prior to the norms that are being developed by teens who are experiencing all sorts of challenges that are directly related to how the mobile device they have is being utilized. Students develop the questions they wish to ask their parents about their parents' life prior to having cell phones and in addition students will interview their grandparents to get a perspective from a different generation.

Their discussion prompt titled Intergenerational asks: Reflect on some of the things that surprised you when you conducted your interviews with your parents and grandparents. If additional topics or questions that came up during your interview that you did not initially include on the worksheet, please add them.  Please explain what surprised you and discuss how the interview went. Write as much as you can but no less than 3 paragraphs. Remember to comment on entries of at least 2 other students.

In addition, in our unit we look at the issue of tension in household surrounding use of mobile devices and house rules. We also look at infographics with data that shows parents vs. teens in regard to use and perceptions.

> As a health educator we are always looking to help students realize the consequences of their decisions. This unit, designed by Mr. Dagan does just that.  Backing it up with research and hard facts students overuse of Mobile devices can lead to increased anxiety, lack of sleep, and poor social skills. Within the unit Mr. Dagan had students track their phone use on a day to day basis along with the most commonly used apps on one's phone. Students were amazed and really learned that they may be on their phones too much. Mr. Dagan developed an outstanding assignment that involved interviewing an elder person that grew up in a different era of technology use. This gave students an excellent perspective of how one functioned without a phone. R. Hippert, PE/Health Teacher

## Sharing with students

An important part of the learning is the ability for students to have ownership of what they have shared. The Nearpod platform provides creative ways for collaboration boards to be a place to have instant feedback. In this link I share two examples of data from students input in class

**Some of what you shared 3B**
**Some of what you shared 8A**

## An unfolding story

There are two ways to analyze the data of a class. One is to look at the entire class and see if the mindset of the students in the class as a whole has shifted or the other approach is to look at the individual student. I this case I will share three examples of student reflections over the course of the 10 classes. These are their replies to the prompts. I believe that a story can emerge from these responses.

| Journal reflection | Book chapter insight |
|---|---|
| **16074** | **16074** |
| **16091** | **16091** |
| **16138** | **16138** |

## Parting note

It's important to note that this device is going to be a part of the life of the student for years to come. The last reflection asks them to try and look at the action they might take in the future.

In your last reflection share some of the insights you have gained throughout this unit looking at our use of mobile cellular devices and your feeling towards what you learned. Reflect on how you see your path moving forward as you continue to use this device for years to come. What are some of the concerns you might have and what are certain things you are certain you know will not occur?

Having other students read what their classmates wrote presents the best way for the students to put in perspective their thoughts and actions. The impact this device has on the daily life of students is in their control and the unit hopes to bring awareness to the students that they can regulate how the device they have affects their actions.

Partial list of the resources used in the lessons:

- **24/6** Giving up screen one day a week to get more time, creativity and connection by Tiffany Shlain

- **Pew Research Factsheets**
- **Infographic**
- TED Talk- **B. Jennings**
- **Human Tech**/Take Control
- **The effect on sleep**
- **Smartphone addiction scale**

This school year 280 students will complete this learning unit as part of their required class curriculum in 9th grade health class.  Student responses to prompts as well as writing prompts are collected and curated in excel sheets that can be viewed by the teacher and administrators. This type of access is helpful to get an individual view of how a particular student chose to engage in the lesson or how the class as a who chose to engage with a specific lesson. This type of approach allows direct student intervention if there are areas of concern or if a question or prompt might need to be written to better address the needs of the student population as a whole group. During the pilot program which ran with 3 classes last year results were collected, analyzed and evaluated. The decision was made that the unit has strong merit and has been approved for integration into the curriculum.

> Students have participated in activities designed to help promote students' awareness of mobile addiction and create opportunities for behavioral change in student use of their mobile device. The overwhelming level of student engagement throughout the unit has allowed for meaningful and reflective discussion amongst students and their families. Mr. Dagan developed this unit using various media sources and has compiled data which has helped Tri-County's Wellness Team to discuss new methods for best practice and decision making surrounding cell phone use. - M. Silva, Assistant Principal/Dean of Students.

*Ariel Dagan is in his 9th year as the Library Media Specialist at Tri-County Regional Vocational Technical High School where he engages with students and staff of 16 vocational programs and academic studies to enhance media and information literacy. Ariel is currently in his 30th year in the field of Education. Prior to Tri-County Ariel has taught learners in a wide range of ages in and out of the classroom. Ariel is a current recipient of the Carolyn Markuson School Library Innovation Grant Award from the New England School Library Association. In 2019 Ariel received the President's Award from the Massachusetts school Library Association. As part of his work at Tri County Regional Vocational Technical High School he has designed an engaging career interest game for incoming students to help them better decide what shop is most suited for their personality and character trait while exploring resources to understand career paths. Ariel has also designed a 9-week unit of study based on the book Grit, the power of Passion and Perseverance by Angela Duckworth which has been implemented with 11th grade students in the Engineering and Dental Assisting shops. Ariel works regularly with academic and shop instructors on new programs to bring more engagement with library resources to enhance the learning environment.*