

Victoria Olivadoti ©2019

Empowering Students to Control Their Devices, so the Device Doesn't Control Them

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"Ms. Olivadoti has helped hundreds of students achieve academic success with her methods. Students and parents know that her system works. They learn that effort and persistence not only brings academic success, it brings confidence and a 'can do' attitude - an invaluable skill that is theirs forever."

Dr. Laura K. Hathaway Founder - The Pegasus School

#### Acknowledgements

I must give credit where credit is due. I want to thank those who have been instrumental in making this book a reality. Firstly, I want to recognize those children who were willing to try the strategies I offered to break their technology addiction. They would prefer not to be named. I was encouraged to write this book by their parents who wished they had known what was behind the screens of the first IPads they gave their children that started the addiction. They had no idea of the dangers that lurked in their children's devices.

I am grateful to those who have supported me through the process of writing this book. Marci Schultz, Karen-Conor Johnson, Patricia Berger, and Kitty Rede offered their expertise with their valued critiques and editing.

I'm grateful to Lion Goodman for his guidance in helping me break through some belief systems that were holding me back from finishing this book.

I've been fortunate to have been mentored by Wendy Lipton Dibner, Mark Victor Hansen, and Jack Canfield. I would be remiss if I did not mention valuable classes I took with Vishen Lakhiani and his Mind Valley programs.

My grandchildren, now young adults, have offered much to this book. As out of the box thinkers, they offered a different perspective and are much better editors than their grandmother.

#### Why Did I Write This Book?

The number one target of advertisers are children. When Honda was planning to go from motorcycles to cars, they created the Kick n' Go with the Honda logo on it. Their goal was to create brand recognition with children who would be of age when the first cars were released. They knew the subliminal recognition of the brand would drive sales their direction. AI products are doing the same things. Our children are the target of those wishing to build brand loyalty.

When I began writing this book in 2021, Artificial Intelligence was being use, but it wasn't obvious how it would impact our children. It's use today is of real concern and one of the most important issues we need to bring to our children's attention. Our children are vulnerable because AI is easy to use and can quickly generate essays, homework answers, test answers, and college admission's essays. Two things users like; fast and easy. Users are also vulnerable because they believe the information generated is truthful and accurate. What is dangerous is not all AI generated material is accurate. It can be an hallucination, which is false out put. Today its greatest threat to all users is that AI can create Fake News. It can generate videos using individual's faces and their voice print to say things they never said in places they have never been. I feel a sense of urgency to get this book in the hands of parents since, *their children need to be taught too question everything they see, hear, read on the internet*.

My concerns about children using devices has been growing since my first experiences in 1999 when one of our students was doing research on an animal and was directed to a porn site. Later my concern intensified when I found myself helping my students break their addictions to their video games and manage the depression resulting from group texts, social media posts, and being bullied by avatars in their educational on-line games.

On January 17, 2021 in an article by Matt Richel in the New York Times, he quoted Dr. Keith Humphrey, a professor of psychology at Stanford University, an addiction expert and a former senior adviser to President Barack Obama on drug policy, who warned parents that, "There will be a period of epic withdrawal." He stated that it will require young people to sustain attention in normal interactions without getting a reward hit every few seconds." He was referring to the hours of device use by children as a result of Covid learning. The excessive exposure and attraction to technology is chemically driven and deliberately designed to addict users. The

children are not practicing attending without receiving rewards. It is not surprising that we have seen huge increases in children manifesting inattentiveness nationwide.

I care deeply about the mental and emotional health of children. I personally have seen bright enthusiastic children's personalities and behaviors change once they were given devices, such as Smartphones, laptops, iPads, even Xbox and Nintendos. At no other time in our past have so few influencers impacted the lives of millions. The devices in our hands are great conveniences. Like the cars that replaced the horse and buggy, the devices pose challenges that were not predicted. Our phones have directly had a negative impact on attention, natural navigational and communication skills, our memories, and have been the result of many more deaths than deaths by drunk drivers. AI is a new application that students need to be knowledgeable about to be protected from the negative aspects it presents. Not even Google are aware of all the ways AI will have a negative impact on all of us. Unfortunately, like the Nintendo before it, the impact isn't always realized until damage has already been done. They are having to reactive instead of proactive, due to the fact that they can no longer predict what AI will do.

As cars became more prevalent, it became necessary to set age limits on their use and train drivers. I believe we are at that point. Now that we know the impact of device use on our brains and the dangers that lurk within them, we need to train our children. There is a reason children are not given a license to drive until 16 years of age.

The first place to begin is with awareness. This book is designed to alert parents to the stranger dangers presented by these devices and suggestions that empower children to be equipped to use devices responsibly and safely.

#### **Digital Skills Readiness Assessment**

Before you begin to read this book, use this assessment to evaluate your children's readiness for independent use of their devices.

- 1. Do your children have the emotional maturity to deal with what they might see on their devices?
- 2. Are they tapped into how their bodies respond to emotions and outside stimulus?
- 3. Are your children aware of the basic neuroscience principles built into all online apps?
- 4. Do your children know how to communicate respectfully while making eye contact with those they are speaking with face to face?
- 5. Can your children identify the multiple ways advertisers are enticing them?
- 6. Do your children manage their time and distractions easily?
- 7. Do they possess powerful critical thinking skills?
- 8. Do your children see the filters and security on their devices as punitive?
- 9. Do your children naturally express empathy?
- 10. Are your children sleep deprived?
- 11. Are your children aware that everything they say when their phones and other devices are on and when they search on-line is being recorded?
- 12. Are your children aware of how Artificial Intelligence is created and how it works?

#### **Dangers Inherent in Devices**

Depression, stress, and anxiety are heightened in children who are addicted to their devices. Online bullying, manipulation by game developers and advertisers, and social challenges are dangers parents need to address. The depletion of important brain chemicals by the games, such as dopamine, melatonin, and serotonin, affect attention, concentration, retention of learned material, and healthy sleep patterns.

AI is not a reliable source of information and can create Fake News. Political campaigns have been using AI to create ads that may not be what the individuals said or did. The danger lies in users believing AI generated videos, articles, and ads. They may seem authentic when they are not. In fact, the person speaking in a video may not be the real person, and what they say may not be what was said. This makes device use even more dangerous. To safe guard our children requires we is teach children to question everything they see, hear, and read that is internet generated. *Questioning-An Essential Skill for the 21st Century Student* delves deeply into how and when to ask. It is the next book to read.

#### Introduction

A thought to ponder: Steve Jobs and Bill Gates did not have technology in their own homes. In an interview with Diane Sawyer, Bill Gates stated he did not give his children cell phones until they were in high school and regretted it later.

My question is, WHY?

According to Erin Walsh, educational consultant, "Digital media is not inherently good or bad: they are powerful. The good or bad depends on how we use them."

According to an interview with Anderson Cooper, Google alum Tristan Harris stated, "Look, never before in history have a handful of people at a handful of technology companies shaped how a billion people think and feel every day with the choices they make about these screens." Steve Jobs and Bill Gates knew this.

These statements are powerful when we think about placing devices in the hands of our children. Once we hand them a device, we are essentially putting their thoughts and feelings in the hands of those whose motives are not in the children's best interest. The good or bad of the device use is going to require children understand the creators' motives and methods.

Since Technology is a part of everyone's future, the purpose of this book is to train our children to be responsible and mindfully be aware as they use their devices. With the knowledge of the neuroscience behind the addictive nature of devices, children can learn to control their devices instead of the devices controlling them.

I am grateful for all the conveniences that technology has provided me. I wouldn't be bringing this information to you as easily if I had to type on the manual typewriter I used in high school and college. I love that I can speak on the phone and see my grandchildren at the same time, because they live far away. This helps me keep the connection with them that just speaking on the phone does not provide. The search engines provided on the internet have helped to quench my thirst for answers to the many questions I am always asking myself. Receiving and sending documents through email saves time, money, and paper. I'm happy to be saving trees. The technology in my car has saved me several times from sideswiping another vehicle. I have always been open to new ideas and look forward to what lies ahead.

However, I am cautious about how these new devices impact our children. Do they really provide our children with what they need, or are they robbing them of activities that support their brains' development?

Riding a bike and doing those activities children traditionally did, such as climbing, jumping, sorting, building, digging in the dirt, and swinging helped their brains develop in a healthy way. At age five, their brains aren't developed enough to deal with what the devices have created. We wouldn't put a five year old in a car, because the part of their brains haven't developed enough to handle the many distractions associated with driving a car. There is a reason drivers' licenses are only issued to individuals 15.5 years and older. Controlling impulses and making quick decisions is much easier once the prefrontal cortex is more fully developed, and that occurs around age 14 in most children.

The iPad is a device that offered so much promise to parents. It could offer educational opportunities for three year olds that promised to get an edge up in elementary school and college. There were claims everywhere about these devices that made parents feel comfortable with what they offered their children and the freedom it gave them when their children were mesmerized by the screen. The entertainment factor offered parents uninterrupted time to do laundry, tend to business, or eat dinner at a restaurant in peace and quiet. It took 15 years for the side effects of these devices to be revealed.

I am not here to discuss the variety of research out there that supports what I have been cautioning parents about since the 1980's. I am here to share thoughts to ponder before placing devices in children's hands that place these children in the palms of game and app creators.

#### **Forward**

All devices are designed to be intuitive, easy to figure out, and our children are natives to them. They are not intimidated by the devices as older users might be. Being able to manipulate the device and navigate the programs is the easy part, but being truly ready requires a new and different set of skills than at any other time in our past.

As things change, I find myself continually reflecting on the same question, "What are the most important skills for today's children?" In over 47 years of teaching, I have seen skill sets in need of adjustment. But since the invention of iPads and Smartphones, I have seen the need for a whole new set of skills that aren't related to how to manipulate the devices. Not having grown up with cell phones, parents don't know how to help their own children. I'm here to do just that.

My goal is to help parents understand the dangers that lurk in their children's devices and offer strategies that help children learn how to control the devices, instead of the devices controlling them.

#### **About the Author**



Victoria recently retired from the classroom after almost 50 years. She taught everything from kindergarten to eighth grade. Her strategies have empowered high school and college students, as well. Teachers nationwide have attended her seminars, in which she shares her powerful strategies. Victoria is a columnist for local newspapers, a blogger, and has authored several books.

As technology has evolved, Victoria saw a need to teach skills that were not being addressed in the schools. Firstly, they needed to learn how to control their devices, so the device would not control them. She also created a program designed to educate and empower students to effectively utilize their time, manage their papers, effectively communicate, and advocate for themselves. Her students are powerful creators and see challenges as opportunities for positive change.

Victoria's methods have created paradigm shifts in how parents, teachers and students view their responsibilities in the learning process. She has mentored hundreds of parents to shift from "helicopter" and "lawnmower" parents into powerful mentors of their own children, while introducing effect teaching methods into the classroom. As a result of being faced by the surprising control devices began to have over her students, Victoria developed methods to help her students learn how to mange their own device use,

#### It All Started With Nintendo



In 1980, I asked myself the question, "What skills will students need in the 1990's?" I saw the impact of Nintendo on college freshmen's performance. Students were not taught how to independently manage their addiction to their games before they left for the unstructured college environment. So many students struggled academically. It became apparent that parents were going to need to shift from controlling their children's play to empowering them to control it themselves. A shift was also needed from being hyper-managed to learning to become empowered with self-management strategies.

As parents were making the shift from hovering parents to powerful mentors, new needs arose. The students needed means by which to manage daily activities and plan for the game playing they didn't want to give up. This required they have a system of organization. The Homework Solutions© approach to homework and classroom instruction evolved as a result of this need. Using backwards planning strategies found in my book <u>Backwards Planning-The Cure For Procrastination</u>, students gained control over their days' activities.

As devices became more portable, it became evident that the games had an unusual control over the players. Parents were reporting that they couldn't get their children's attention. Stopping their



children's play was getting increasingly more difficult. This was impacting students' abilities to manage the schedules they had planned for themselves.

Why was this happening? The answer came in the late 90's. Neuroscientists were investigating the brain changes occurring as children played their games. New information indicated the reason for the parent's difficulty getting children to stop playing on their devices. **The games** were stimulating the pleasure center of the brain. Volumes of chemicals important to concentration, attention, retention, and sleep were being excreted at alarming rates during game playing. The desire to continue the pleasure creating activity made it next to impossible to stop.

The children who learned my "Seven Secrets About the Brain" understood how the games were impacting their performance. They became empowered to make decisions about when and how long they would play their games.

Because of the chemical dependency created by the game and the inability to concentrate or get reparative sleep after playing, students became more discriminating as to when they inserted game playing into their daily plan. It became common to hear eight year old students say, "I don't have time to play today," or "I am not going to let the game control me, because I am going to control it!"

Fast forward 20 years and the devices' distractibility has increased exponentially. Things have changed dramatically from the time I received the first frantic calls from worried mothers of freshmen who were flunking out of school.

The games children are playing today are more complicated and present challenges that Nintendo did not. Couple how children are being manipulated by constant pop-up ads and we have something major to worry about.

#### "The Dopamine Lab"

There are businesses whose sole purpose is to "hack engagement and retain attention." 'The Dopamine Lab' prides itself on having the perfect formula for doing just that. The owner, Ramsey Brown, is quoted on his LinkedIn site to be "The hacker of engagement and retainer of attention." His job is to create a code that will guarantee users will stay longer on sites that use his code. His customers enlist the help of neuroscientists to test the brain activity of the new games. If the game does not excite the brain enough, developers will change the game until they get the stimulation necessary for the brains that are no longer happy with the slow pace of Mario Bros.

Another invention that needs new skills is that of internet currency. Children have become the primary target of unethical educational game creators.

Now we are in 2021, and I am asking the question again. What will our children need to learn <u>now</u> in order to be successful, independent managers of their devices?

Through experiences with hundreds of students, the answer came to me. They need several skills and character traits to maximize the use of these devices that were not a concern 25 years ago. Being aware of the damaging break down of communication, interference in development of meaningful relationships, and a catalyst to depression and anxiety is crucial for children.

I ask parents to consider their own child's readiness for that seemingly innocent device they can hold in their hands.

If you haven't given your children devices yet, they eventually will have them and need to be prepared for what lies beyond the screen.

The following questions will help parents determine if their children are device ready

#### **Question #1:**



### Do your children have the emotional maturity to deal with what they might see on their devices?

Emotional readiness means they are prepared for shocking and unexpected images. It means they are mature enough to deal with unkind things said about or to them online.

Even with filters, there is a chance children will encounter something they didn't expect. In the late 1990's, my students had access to personal computers in their homes for the first time in my teaching career. As a teacher, I was very excited to offer another resource for the students to use in researching an endangered animal. I had used the internet to research different topics for my personal use and it seemed like an amazing opportunity for students to learn even more than they could learn through books.

I wasn't prepared for the call from a parent who felt I was negligent in asking the students to use the internet. When his son went online to research the snow leopard, he did not expect to find a porn site. I was shocked! From that point on the children were not allowed to search for information independently. Their parents could find the information for them to use.

#### BEWARE OF INNOCENTLY NAMED PORN SITES

Have you ever looked up a term and found items related to it that you didn't expect? I did and it wasn't good.

Just two years ago, an innocent third grader, receiving a site to look at from a friend, was not given a fun game to play but a porn site. None of us were ready for that exposure.

Expensive filters on their home computers are not truly secure. Children as young as 8 years old are learning how to hack through their parent's internet filters. It is best to not allow children to have 100% access to the internet without supervision, or be sure they have the emotional maturity to handle what might show up.

If they have class projects, students can work off-line. Many schools offer their students sites they may use that have proven to be reliable resources. It is when the children decide to do their own searches that they get into areas we wouldn't want them to be exposed to for their own mental health.

We need to consider whether our children are emotionally ready for the social challenges that devices create. How will they process comments from others that make them feel they are missing out on something? I had an upsetting experience recently. I saw a post about a party all my friends were at that I didn't find out about until after someone posted the pictures. How would your eight year old or teenager respond to finding out he/she were left out? Do they possess the cognitive skills to process their feelings and not let it affect their self-esteem?

#### The bullies on-line don't look like the bullies of the past.



**Bully Manager:** The bullies today are more harmful. They are in the games the children play and the social media they tap into.

Ten years ago, I was approached by a third grader who was having problems getting to sleep, because a group text was going around. It was an unfriendly text about a good friend of hers. She couldn't sleep, because she wanted to defend her friend, but she didn't want to be dropped from the group. The group text went on until 10 pm. Dealing with emotions when

one is tired, is not helpful. The advice I gave her was to turn off her phone and leave it in the kitchen. I encouraged her to ask to be removed from the group text, because she is guilty by association, even if she didn't agree with what was being said, she was a part of it. We discussed her reasons for staying connected to a group of girls who were not nice to each other. She eventually decided to break away from the group and was prepared to be the subject of the next group text. That was a hard decision for her to make, but had she not asked for help, she would still be in a very unhealthy bullying group. This same group of girls, who are now in high school are continuing their ugly texts, but my student has found another group of girls who are more supportive.



Those who have not had support are experiencing terrible sadness and anxiety. If parents are going to allow their children to text, they need to prepare them for what they might experience. The children need to be encouraged to share unkind things they see with their parents so parents can counsel them just as if it was happening face to face. It is much easier for the children to bully on-line than in person. So, before we hand

over a cell phone or iPad to a child we need to be sure our children know the potential for on-line bullying and how to handle it. We need to make sure they have healthy and strong self-esteem. Having strategies to solve challenges before they occur feeds into a healthy self-esteem.

#### "That's not what I meant."

Texts and emails can be read many different ways. Each offering a different message even though the words are the same. Understanding how to read texts and emails will be important skills. It is also easier to misinterpret what is typed. One does not hear the inflections in the other's voice or see the facial expressions that add meaning to the words. Depending on how an email is read can cause a misinterpretation of the emailer's intentions. I often have friends share a text with me saying it was sent with an angry cutting tone. When I read it, I didn't react the same way. We bring our own expectations into the way we read the text. Understanding that all texts are not a form of bullying, but merely our interpretation of what we read. This requires a level of understanding and maturity that not all children possess.

#### Why Do Bullies Bully?

It's impossible to stop bullying. It has been here forever and isn't likely to stop. What can help is a clear look at what is behind it and what to say to a bully to be empowered to deal with it if it arises.

Awareness is half the battle. Bullies are usually unhappy people who want others to feel awful, too. Bullies are showing us what is going on inside of them. I have never found a bully who was truly self-confident. Those who blame and shame are usually suffering inside. They may not be aware of it, but bullying someone who is a threat to their self-esteem makes them temporarily feel better. If the victim of the bully responds in a way that indicates they are hurt, the bully wins. Understanding what causes bullying is helpful in combating it and not letting ourselves be impacted by it.

#### What to Say to a Bully

Unfortunately, as a child, I was told if someone bullies you it is because you did something. That is a belief I have had to crush and erase. In reflection, the only thing I did to promote the bullying was to try to defend myself and I allowed them to see I was hurt. They didn't want me to feel better than them.

Karen Connor Johnson shared with her daughter, "We don't always know what is happening in their own lives. It can affect the way they treat other people. You have to look past that."

Instead of responding to a bully by being hurt, they can shift their thinking to, "I wonder why that person is so unhappy?"

Sharon Goldhamer, a superb educator, shared one thing we can say to bullies, "If your words were meant to hurt me, you weren't successful." I added to it, "I can't be concerned with what you think of me. I know who I am. You might want to find someone who thinks your opinion matters. I don't happen to be one of them."

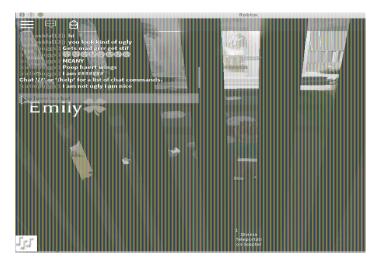
When I told my mother that someone said I was ugly, her response was, "She has a right to her own opinion. That doesn't make it so. I think you are beautiful. You like vanilla ice cream, your

dad loves strawberry, and your sister loves chocolate. It doesn't make one better then the other. It's just people have different things they like and don't like. Next time she says you are ugly, tell her she has a right to her opinion, you just don't agree with it." Every year I share this with my class, and many of the students have found that it stopped the bullying.

#### **Beware of Online Friends**

Communicating on-line isn't all bad, but children need to be aware of who they are communicating with. They need to know the person face-to-face. Once they enter the on-line world they become targets of unethical people who will bully them into purchasing virtual items. Unfortunately, children are vulnerable and want to have friends and people who pay attention to them. They don't want to lose friends either. This makes them a perfect target for the manipulators.

# Noimi's Story Unexpected Bullying & Stranger Danger in Educational Games Read about one girl's story.



What appeared to be an innocent "educational game" presented a bullying situation to one of my students. I noticed that she was not doing well in class and looked ill. She would lie her head down on the table when we were having classroom discussions. As the days passed, I became very concerned about her because she would wander around in the class and lay on the couch during class discussions. She complained of a

stomach ache and was sent home. This was not normal behavior for the spunky bright happy child who entered the classroom in September.

The next day, my colleague shared he had overheard her speaking to a friend, "I am having a panic attack. I bought something online and I know my mom will kill me. I can't stop thinking about it." I hadn't realized that this situation was causing her to be emotionally sick.

After investigation, the reason my student was so upset was due to the fact that her mother



restricted all use of any devices other than her Chromebook. However, she had discovered how to access the game from her school issued Chromebook.

After gaining access, a friend (a virtual one) in the game wanted her to buy a new outfit, so she didn't look like a noob. A noob is a poor person. However, the outfit was the virtual kind, not real. She looked for free items, but she was told by the virtual character they weren't good enough. She caved to the bullying and bought a virtual outfit for \$450 internet

currency that cost her fifty real dollars. Even though she knew her mother did not approve of it, she gave into the pressure of the bully. The avatar also showed her how to get free passes so she didn't have to take the tests in the game, which made it look like she was doing well.



I became aware of another challenge that lies in children's understanding of the value of money. Using a debit card or gift card holds no value to children. For \$25 this student could get \$250 internet currency. The cheapest outfit cost \$560 in internet currency, so she had to spend \$50 to get a new outfit to change her identity. Mind you, this was not an outfit that she could wear to school. It was a virtual outfit. It wasn't real. Later she shared that she didn't actually

pay for it, because she used a gift card. There is clearly a disconnect to the value of gift cards. That is a topic for another time about teaching the basics about the flow of money.

The game developers are capitalizing on this lack of understanding. Unethical people work the games like a job, for the sole purpose of making money. What I witnessed online is not allowed on playgrounds. The name calling and bullying was rampant in this educational game from what could have been an adult and not a child at all.

My suggestion is to play the game along with your children so you can point out the stranger danger in their games and address why some avatar might be trying to bully them. We need to make them bully proo

#### **Question 2**



Can your children identify the feelings ignited when playing a video game?

Children often engage in games without being aware of how the game impacts them. Are your children in touch with the psychological and physical changes in their bodies that occur as a result of experiencing different emotions? Can they feel the physical change resulting from excitement when they work hard at a task and finally accomplish it? Can they identify the signs of stress when they are afraid they won't have the right answer to a question? These seem like odd questions unrelated to the use of devices, but being self-aware focuses attention in a different way. Being aware that the device can make them experience emotions will be important to managing the devices.

According to Sherry Turkle in her book *Reclaiming Conversation*, "Frequent multitasking is associated with depression, social anxiety, and trouble reading human emotions." Because apps require multitasking, we need to be sure that the children can recognize how the devices are affecting their bodies, so they can ward off depression and anxiety that is associated with their use.

If a child can understand how the chemical reactions feel in their bodies when they experience stress, joy, and exhilaration, they will be able to recognize those changes when a video game or Youtube loop has also grabbed them. The objective is to recognize the pull, so they can learn to manage it.



One exercise I do with children to experience how different emotions feel in their bodies has proven helpful when they are asked to identify how video games make them feel. They experiment with visualizing themselves working hard at a skill, such as kicking a ball into a goal, when they hadn't been able to do it before. With help, they can focus on how success feels in their bodies. It's that, "Yes!" moment that gets the blood flowing and our hearts thumping. Having them clench their fists and doing the celebration, "Yes!" movement, can help them identify the dopamine release one gets from pleasurable experiences.

Once they can identify it, they will be more likely to identify that feeling when it is artificially given to them in a video game. If they cannot consciously be aware of how different emotions stimulate the brain, they will be more susceptible to the unethical practices of game coders like Ramsey Gordon of Dopamine Lab. His codes "are guaranteed to create the same powerful and overpowering hooks as Facebook at less expense." Gaming companies are targeting our youth so they can get them hooked and be guaranteed followers in the future.



#### **Dopamine Release at Work**

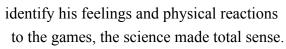
It's more difficult to stop device use by children once they have experienced the dopamine releases programmed into the games. The adult brain is less susceptible to the dopamine draw of video and youtube because it is fully developed. Waiting until children's brains are completely developed will aid in the difficult challenge of managing a device that is designed to not be managed.

Check out my blog entitled *Device Readiness Test #3 Self-Awareness and #4 Bully Management* to read about a couple of fourth graders who used **self-awareness** strategies to manage the technology. They proved far more powerful than any external controls placed on his playing.



Another youngster attending one of my student seminars asked, "I keep telling myself that I am going to stop playing. Then I find myself on the device again. I feel like a failure. Why is this happening?" I asked him if he can tell when he is being pulled back into the game. He reported that he just found himself playing, even though he wasn't going to. I asked him to pay closer attention to what

his body felt like while and after he was playing. Two weeks later, he shared that he noticed that he was in somewhat of a fog when playing, and right afterwards he felt unsettled. His mother noticed he was agitated when he stopped playing. He was encouraged to pay attention to those feelings the next time he played and then go outside and ride a bike when he experienced the unsettled feeling. At the next class session, he stated, "It almost felt like the game was controlling me. When I stopped, it was trying to get me back. When I went for a bike ride, I could stop the feeling." I shared the neuroscience built into the games with him. Once he could





#### **Break the Addiction Loop**

Have you ever gotten caught in the Youtube or Facebook Loop? A student loved planes and would find he had spent two hours on Youtube because new options continually

pop up when the last one finished.

The following is one strategy I gave him to break the loop:

- 1. Set a timer for fifteen minutes before you open the screen.
- 2. When the timer goes off, close the screen and notice how your body feels. Is your heart pounding faster? Do you feel anxious?
- 3. Now take several deep calming breaths, until your heart rate slows down.
- 4. Move away from the computer, because you have broken the chemical reaction that plays a part in the loop created by apps.

#### **Question 3**



### Can your children identify when they are being manipulated by game developers whose purpose is to hack engagement and attention?

Asking children to reduce their use of devices can backfire. The forbidden fruit becomes sweeter. Placing restrictions are ineffective, because of the neuroscience principles built into the games. As soon as adults are out of the room, children will sneak the device. One young man in my class was caught under the covers at 1:00 am playing Fortnite. The device was taken away from him, but somehow he got it out of a locked drawer and snuck it into his room after his parents had gone to sleep. He nor his parents were aware of the addictive nature of the game that caused him to awaken in the middle of night and steal it out of the drawer to get a fix.



During class, this student began having unusual behavior. He would have meltdowns, fall down on the floor, and rock back and forth. His behavior looked something like a drug addict going through withdrawals. At the time, we knew very little about the intense impact of the game Fortnight on children, so I didn't put the two together.

When I contacted his parents to report this unusual change in his performance and ability to handle challenges, they reported they had removed his device from the house and restricted him from all computer use. It took him four weeks before I noticed an improvement in his ability to handle challenges.

When I contacted his parents to report this unusual change in his performance and ability to handle challenges, they reported they had removed his device from the house and restricted him from all computer use. It took him four weeks before I noticed an improvement in his ability to handle challenges.

What is the neuroscience behind this attraction? The number one cause of this uncontrollable desire to play and not be able to stop is a chemical called dopamine. According to Psychology Today, "**Dopamine** is known as the **feel-good** neurotransmitter—a chemical that ferries information between neurons. The brain releases it when we eat food that we crave or while we have sex, contributing to feelings of pleasure and satisfaction as part of the reward system." Developers have become very good at stimulating the excretion of dopamine in brains through their games and social media platforms. The more one gets from the dopamine, the more a desire to repeat the feeling.

When children are given permission to answer honestly without judgement, they will admit that they have told parents they weren't playing on the device, when, in fact, they were.

#### Why Will Good Children Lie About Their Playing Habits?

#### It's Chemical!

I begin training students on how to manage their devices by sharing what the developers know that neuroscientists and sociologist have discovered about our innate drives:

- 1. Developers know our brains are innately drawn to novelty. That's why Apple has a new version of their phone every year and apps are being added daily.
- 2. We are genetically designed to make connections for the preservation of the species. All social media platforms capitalize on this fact.
- 3. Developers know the brain is taking in information even when we are not aware. Advertisers also capitalize on this knowledge.
- 4. Developers have discovered how to stimulate the pleasure center of the brain to release massive amounts of dopamine. The feel good reaction we get from games we play, the likes we

get on social media, and the prizes we can win if we reach the next level of an educational game are all designed to do one thing: **keep us connected for as long as possible.** 

Read my blog entitled *Mother Suing FORTNITE* to read about a parent who is suing them for the damage it has done to her son.

Read my blog entitled *Signs of Technology Addiction in Children* to read about another student's reaction to Fortnite.

#### Two More Stories of Challenges and Using Neuroscience as the Solutions

The performance in my class of two of my third graders was less than desirable. They were having a hard time making sense of any of the concepts being taught and were having difficulties staying on task and completing simple assignments. Their second grade teachers did not see the behaviors we were witnessing.

After further investigation, it was discovered that both boys were heavily into their video games. We couldn't say for sure if the games were causing the change in their behavior and their cognitive skills. It only came apparent when the boys received a little neuroscience lesson about the games they were playing. They discovered that they could tell when they had the feeling to play and understood the reasons why they didn't want to do anything else but play, but that was not enough to get them to independently stop their game playing. They would agree to limit their gaming to see what would happen, but they did not have the brain development which would allow them to employ impulse control. They were at the mercy of the dopamine loops built into their games.

Each child tried to limit playing, but admitted that all they could think about was getting home to play the game. They decided to limit themselves to weekends only. This did not improve their classroom performance, because after two days of playing for too long, it impacted their performance on Monday, Tuesday, and Wednesday. The weekend game playing impacted the home life. One child couldn't stop long enough to say good-bye to his favorite grandparent.

The children experimented limiting their play to only 1 hour on Saturday and Sunday. This was helpful for only one child.

To improve the other child's performance, I asked the parents to take away the devices for the rest of the semester. Once the parents understood the impact of the game on her son's brain, they restricted all play. After three weeks of no playing, this young man became a different student. He could concentrate in class and his performance on all assessments demonstrated dramatic improvement. I was then able to teach him how to control his game use instead of it controlling him.



It was the neuroscience information that helped my students recognize what was happening to them. It was also enough information to convince them that the control the game had over them was beyond their own control. No matter how strong-willed they were, they realized the chemical control was stronger than them. They did not resist the full time loss of their devices when their parents took them away.

One-fifth grader, who had been trying to stop his own play, told his mother, "The game is calling me from my desk." He decided the only thing he could do to stop the pull of the device was to compose his homework off-line, and when he was finished, he needed to store the computer in his parents' room. At first, he admitted he felt like a failure because he was trying so hard to control the device. He felt guilty when he knew he shouldn't be playing. He could feel the change in his body, and it told him to stop using his device. Once he understood the reason the device had control over him, he wasn't so hard on himself and could break the addiction loop. It was not easy at first, but the longer he didn't play, the less he wanted to play.

After one month of device free time, one boy reported, "I feel so much better. I can pay attention until I get my work finished. I still want to play. It was all I could think about before. I am so glad I don't think about it all the time anymore."

Being self-aware and having the neuroscience knowledge to help understand the physiological changes they were experiencing made it possible for them to independently manage their devices.

#### **Question 4**



#### Are your children Effective Face-to-Face Communicators?

Does your child know how to have meaningful discussions face-to-face with peers and adults? According to Sherry Turkle in her book *Reclaiming Conversation*, she states, "Face to face conversation leads to greater self-esteem and an improved ability to deal with others. According to Sherry Turkel, "Conversations cure problems." Knowing how to have such conversations require that children know how to listen and respond appropriately. The dinner table is the best place to learn this type of conversation. They need to see respectful dialog in which family and friends make eye contact and give each other time to finish a statement before responding. The



dining table is a great place to learn to share differing opinions and have respectful discourse modeled. Internet conversations can shake anyone's world, because they make it easier to be unkind and disrespectful. It's imperative that our children have the elements of respectful dialog modeled before they encounter the unhealthy form of communication experienced on the internet.

This is a vintage photo of my siblings and me. We may all witness the same event, but we never see it the same way. If we retold the story our uncle shared, we all had totally different

versions of it. Seeing the event through their eyes has been really important to me. It opens me to different perspectives. I don't always share their rendition, but it is important to hear their views. Not everyone critically thinks about what they are viewing. Today's media users appear to believe everything they hear and read on the internet. That is dangerous. The influence of social media has made it difficult to hear and respect differing opinions. Our children need to learn to be open to a variety of versions of the story on all forms of media whether it be television, radio, social media platforms, or from internet articles.

Many college professors have stopped teaching critical thinking. I hear from students who have had to learn how to regurgitate the professor's opinions in papers and on tests just to pass the class. We need to encourage discussions that offer differing opinions.

Students have lost the communication skill of making eye contact. It's the most important thing in a conversation. It shows one is listening and cares about what the other is sharing. Recently, a foreman on a construction site stated he was having a hard time with his new hires. He said that they failed to make eye contact with him and are always looking downward. He reported that he thought that was one reason they couldn't follow directions and shared, "I think the problem is they can't make eye contact with me and are only communicating through text. It's hard to get good reliable help for all the jobs I need filled." If we want to assure the success of our children, we need to be sure they can communicate effectively face-to-face and know proper conversation etiquette.

### Question 5 Are Children Consumer Wise?

### Can they identify the advertising strategies used to capture their dollar?

### Children are the Advertisers' Dream So They Get Them Young

These FREE educational games are nothing more than a gateway to social media addiction before the children have the emotional and mental maturity to cope with it.

The number one target of advertisers are children. Advertisers know that children have buying power. As a result, they have used the games the children play as a platform for generating tremendous amounts of revenue.

Children are very susceptible to impulse purchases. In some cases, players in their games are adults manipulating children to purchase virtual clothing, tools, armor, weapons, and other items for their avatars. An avatar is a virtual caricature of a real person.

In an article in the LA Times in November 2019, Apple announced they will continue to offer free games to their users, because they earn \$1 billion a year just from these games. The amount has grew to 2 billion in less than a year from the report. Imagine what it is today and what it will be in the future as technology is changing exponentially daily.

Even cereal companies have gotten into the video game business. Almost every cereal box has a website the children can go to and play a free game. Their motives are to expose children to other cereals and products they might want but have not tried. The mere suggestion of a new and improved cereal with a different taste is enough for children to badger their parents into making a purchase they might not have made had the child not seen it on the screen.

<u>Millsberry.com</u> had the most hits getting 387,000 children to use its site each month. The usual time frame that kids spend on these kinds of sites averaged 24-minutes per child. But again, parents aren't even aware. How could a game from a cereal box be bad for them?

The attraction to video games is everywhere. So, no matter how you try to monitor your child's technology use, they are still being exposed to advertising on a **subconscious** level that is targeting them.

## **Educational Free Easy to Use**

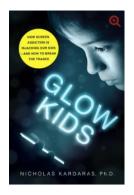
#### **Limitless Imagination Opportunity**

## Teaches Digital Citizenship Teaches Coding Loyalty Perks

These powerful words, phrases, come-ons are used to capture the eye of students and parents, and make them feel that they are learning something as they play the innocent looking games found on the internet for **FREE**.

Just like other advertising strategies, which are solely designed to capture our dollars, video games may appear to offer educational value, when in reality, many of their creators have ulterior motives and that is to "show them the money."

"Receive \$1000 in internet currency for only \$25" is one of the strategies employed. It seems like a great deal until we see the cost of the items for sale. Children need to be alerted that something that looks like a good deal, often has some hidden benefit for the creator, but not for them. Because many of the games are backed by advertisers, their video game companies are in competition to capture a new market, the under 13 age group. They want to hook the children when they are too immature to understand what is really going on.



According to Dr. Kardaras in his book *Glow Kids*, "In the 1990's, Intel competed with other companies in the 'war of the eyeballs.' It was a fierce competition to capture the attention of kids and thus create the most hypnotic and addicting products that they could sell." They were successful and now the internet is like the **wild, wild west**, with the war continuing between many game makers. The manufacturers and creators of online games have no laws to stop them from deceiving children, so without conscience, they are going after those easily influenced.

I am aware there are many helpful tools on the internet, however, in the

beginning many of these so called "educational" games looked innocent, leaving parents with a false impression. They believed they were safe for their children. But as I have discovered, they offer no educational value, but do serve as a platform for bullying a child into spending money. I discovered several children playing the same game "educational" without their parents' knowledge. Parental permission was not required to play in any age group. All that was necessary was to click the "yes" button when asked if they were 18 and of age and older.

I was curious. I also wanted to speak from a perspective of a user, so I tried playing a very popular game for children under 13 years of age. I found no educational value other than the children got to a pretend school where players are encouraged to pay for passes so they didn't have to take the classes. They purchased internet currency with real dollars. One game offered \$250 of their virtual money for \$25 of real money. This seemed like a lot to the children, but the items desired for the virtual purchases began at \$300. Other games offered similar values, but their virtual currency had a different name based on the name of the game and their exchange rates were different.

There were several strategies I discovered while playing these games that were the most disturbing to me. The first thing I saw on the screen was bullying.

FREE was used several times in the game. FREE clothes, but more socially acceptable clothes cost \$300 internet dollars, which cost \$25 for \$400 internet money. I was told in the game that I had earned \$160 for reasons I have no idea. I didn't take a test, solve a challenge, or get out of a maze. I simply moved my avatar from one place to another. Like anyone who has money to spend, I went to the online store. There was not one item, not even a hair bow, that I could purchase without buying more virtual currency.

The game hooks children into a daily routine by offering something FREE everyday. One child shared how she had to play or she would miss the extras that got her more points. Boys have shared that they have to go on everyday or they will miss the most powerful weapons to win the game.

#### Youtube Warning!

- I wondered how Youtube could make so much money when they don't charge a fee.
- It's the ads on Youtube. Like gamers, Youtube advertisers know the neuroscience behind visual advertising.
- They know our brains are hardwired to connect with others. It's a biological need.
- They know we don't have to click on an ad to have impacted users on a subconscious level.
- Our brains are taking in information all the time that we are not even aware of. So, the fact that the ad appears is a payoff for the advertisers.

#### **Advertising Hooks That Hack Children's Attention**

The following are strategies used that children need to be aware of before they receive a device:

- 1. They appeal to our innate hard wiring to be connected to others, so they say, "Your Friends Can Play."
- **2.** They offer FREE **Daily Bonuses** to lure children back every day.
- **3.** They offer bonus items that are only available that day. If you don't purchase it today, it will be gone tomorrow.
- **4.** Advertisers offer **specials on game related items**, such as stuffed animals, t-shirts, etc.
- **5. Behavior modification algorithms** are used to determine the exact time to offer each specific player a prize or reward. Pointing this out to children will help them see the reason *they should spend unpredictable amounts of time on their games*. One day they might play for 15 minutes and the next for 10 minutes, then 30 minutes. Once they go back to playing for 10 minutes, they are more likely to receive prizes sooner. We can teach our children to confuse the algorithms the developers use by not being a predictable player. If they vary game time, the algorithms are less effective.

**Inflationary strategies are used to lure children to make purchases on-line.** The game creators inflate the value of their internet currency and the cost of the items for sale, which misleads children to think they are getting so much more for their real dollars. An eight year old



boy shared with me that he could buy \$1,000 Vbucks for \$25 dollars, but the items for sale were over \$1,000. Every transaction is done through the internet, so it is not surprising that his mother flipped at the \$150 charge on her credit card that was attached to the game. Another student stated, "It didn't cost me anything. I used a gift card." This statement punctuates the need for children to understand the flow of money, that a credit card is not free, and money is used to purchase gift cards.

#### **Question 6**



### Are Children Independent Time Managers Can they manage distractions?

Do your children possess the ability to block out distractions when completing everyday tasks? If they can't manage the natural distractions in their world, they will be even worse on a device. The devices are engineered to establish full engagement and maintain it for as long as possible. constant attention. This is why so many students in the late 1990's were found in their dorms using water bottles to urinate in so they didn't have to leave their dorm room.

According to Dr, Walsh, "Neuroscientists have proven that it is impossible to effectively multitask. Each interruption causes more errors, results in less information retention, exhausts the brain, and makes it harder to concentrate. To assure our children's success, they need to be aware that they are ineffective if they try to do more than one thing at a time. This requires they possess the skill of being focused on completing one task, while blocking out other detractors "

Are they emotionally ready to limit their use of devices? My friend shared his experience when he does on-line research. "Before I get a chance to begin my search, I am hit with compelling headlines. I know I shouldn't click on them, but the pull at times is too much, and I find myself going down the rabbit hole of headlines that have catchy phrases. I'm being pulled into articles I really don't have any interest in." Even people who know better can be easily pulled in, because the developers are so clever at how the distractions are presented. If an adult that knows better

still can't resist the catchy headlines. "The part of children's brain that controls their impulses is not fully developed, so it makes it even more difficult for them to resist the pull of devices."(1)



Coders know how to undermine our brains, hack our engagement, and retain it as long as possible. Possessing the *awareness readiness* skill of how engagement is created by these hackers will be crucial and what it feels like will give them a fighting chance of managing their devices.

I have been asked, "Isn't it better to put locks on their devices and time limits?"

Putting time limits on our children's devices or parent manipulated controls will provide a secure feeling for parents, but it will not serve the children well. It is more powerful for them to learn how it feels to be manipulated by devices and apps and **then train themselves to set timers for fifteen minute periods of time.** Especially for children who like to be in control, this awareness is all they need to become self-reliant in the management of their own devices. Students are more likely to adhere to time limits if they set them themselves. When they leave the home, parents won't have to worry about who's going to manage their children.

According to researcher and doctor Dr. Jenny Radeski. "Children's and teens' developing brains are potentially even more susceptible to "persuasive design," because the part of their brains that help them manage impulses and filter out distractions is **still under construction.**"

Typically, children don't plan their actions, they react. We see it on the playground, in the classroom, and even in the car. I am reminded of a ride in the car with my grandchildren. They were fighting over a toy and I was just about to pull over and create my own distraction by taking it away. Suddenly, the arguing stopped, and their attention was drawn to the huge brightly painted ice cream sundae on a forty-foot billboard. The toy that was so important was no longer their focus, because the bright colors and thought of ice cream diverted their attention. The same thing happens in my third grade classroom. The children will settle down into their assignments and all it takes is one student to make a sound and it distracts those who have not developed the self-control to continue their focus on what needs to be done.

On Ms. Erin Walsh's website, she refers to the ability to manage impulses as an executive function which is the brain's traffic controller. In a child, it is not fully developed, so it is hard for

them to hold information in their conscious awareness while blocking out the bells and whistles provided by the internet.

She asks us to ask ourselves, "Can the children block out noise while they are working on an assignment? Are they able to ignore the doorbell when practicing piano? Can they play "Simone Says," "Freeze Dance," or remember to go upstairs, get their laundry and come back down without being distracted by their Legos? Then they will be more likely to ignore the pop-ups, bings, rings, and cute little characters on the internet."

If they can't complete tasks without losing focus, internet exposure will increase inattentiveness.

#### **BEWARE of POP-UPs**

Our computers give advertisers valuable information and they use the study of our purchasing patterns to send us Pop-ups. I love the convenience of typing on a device. I would not go back to a manual typewriter, nor would I trade my device for an electric typewriter. However, I was much more efficient in gathering my ideas and recording them when I didn't have all the distractions popping up on my computer. I block them, but they still show up somehow. I don't have the time nor the expertise to stop them, nor do I have the desire to spend the time finding out how to do that. As soon as I learned how to stop one interruption, there is another one to take its place. So, I had to learn how to ignore them. Believe me, it wasn't easy.

Because the ads are driven by what the Artificial Intelligence gathers from our searches, it will send ads specific to our interests. By ignoring, the AI gets the message and sends fewer. If I click on just one, the ads come more often for similar products or offers.

## **Question 7**

# Are Children Critical Thinkers? Do they ask questions of what they see and read?

Another unexpected challenge arose in the late 1990's when our class began researching animals on the internet. The children began finding differing "facts" about how many eggs an animal laid, how many are left, etc.

As stated earlier, because some of the sites were questionable, we quickly determined the children could not use the internet without a parent previewing and determining if the pages were age appropriate.

We needed to train the children to determine the authenticity of their resources. Prior to the internet, publishers of books and magazines had done fact checking for their publications, but at the time, we didn't realize anyone could publish on-line and look like a reputable source when they weren't. It wasn't long before we determined the "facts," in some cases, were only the opinion of the authors.

We now have even more information and more sites that are not age appropriate for children. According to Lion Goodman, "The internet follows the 90/10 rule. 90% of the material is not reliable."

AI has introduced a new challenge. 25% of what it generates can be considered fabricated. It can make up names of books, put bits of information together incorrectly, and even create videos that are misleading.

Information literacy is necessary for safe navigation of devices. "Information literacy includes the ability to identify, find, evaluate, and use information effectively. From effective search strategies to evaluation techniques, students learn how to evaluate the quality, credibility, and validity of websites, and give proper credit," Common Sense Media.

An effective question asker is one who is critical of what is seen on the internet. They don't accept everything just because it is found on a search.

They need to understand that merely posting information on the internet does not make it credible.

Can children question the motives of the person who makes friends with them on-line?

Can children question the ads that pop-up on their screens, as they play educational games?

Children need to question the motives of creators who ask them to do things on-line that they would never do in real life.

**Pokemon Go is** an example of such a thing. How many people questioned the motives of Google. It appeared the game was designed to get people outside, but what they didn't know was the underlying motive of the creators. It was a competition between developers who wanted to see if they had the **ability to control the masses.** They created unusual situations that got people doing things they **would not normally do alone**, such as jump fences, knock on doors, etc.

Our children need to be cautious of games designed to get them to do things they know they shouldn't do just to get the reward.

*Artificial Intelligence* has been used for years to collect data to make it easily accessible. It's original use has morphed into something detrimental to children. Very few anticipated the negative impact technology would have on not only our children but society in general.

A wise man said, "The devil doesn't lie. He just omits all of the truth." AI is no different. Children must realize that not everything they read, see, and hear is necessarily true. They need to question everything. They need to look for varied views so they can form their own opinions. They will need to look elsewhere for information, because not all opinions will be found on the internet. It is a filtered source. Encourage your children to read books, magazines, and newspapers to find different views.

One of my former students wrote, "In a matter seconds, I can stump Chat GPT and other large AI apps." Should students be using AI to do their homework? Depends on how you feel about plagiarism. It's not their work, they didn't do anything but put in the search terms. I'm more in favor of ingenuity and to teach kids where this tool can be helpful and highlight its failings, showing ultimately understanding is more important than a one time result."

When students realize that A.I. is only as smart as the person putting in the information, they are less likely to trust what it generates. Many bits of information may be omitted, which leads to a different meaning. Missing data can change the entire meaning and results of research. Children need to be critical of everything they see.

## **Questions 8**



# **Are Children Security Savvy? Do They Understand the Reason for Filters?**

If you were like me and thought the filters offered by security companies were fail proof, I hate to burst your secure feeling. There are sixth graders who figured out how to hack the school's and their home's top security.

I have always believed education is the best way to help students become independent. Many students see the filter as a means of keeping them away from some forbidden fruit. If they understand that the **filter is to protect them** from those who have **no concern for their welfare and want something from them**, they will see the filter in a different light. The filter should be perceived as something like a front door lock. If they see it as something that keeps out less desirable people and protects them inside, they are less likely to try to hack their families' internet filters. The filter keeps out unethical people who wish to shock or manipulate children to do things for their personal gain.

#### **Phishing Alert**

Do your children know what they should **not** reveal to anyone online? Strangers can come into their games, make friends with them, and then ask for personal information. Naive children wouldn't think there is anything wrong in answering questions about where they live or giving out their phone number.

Phishing is a hackers way of capturing information from your computers. Children need to be aware of the possibility that someone will ask questions that they are never to answer.

## **Question 9**



### Are the children empathetic?

Everything that is written on the internet is there forever. Recognizing how one's words can impact others is very important when allowing children access to social media. Over stimulation of many games is having a negative impact on the development of the part of the brain that controls empathy. According to experts, the games are igniting children's brains in unnatural ways. The result of one structure being over-stimulated, is that another atrophies. In other words if one structure becomes overdeveloped, another will not form to its normal size. Researchers are convinced that early and excessive use of games like Fortnite during crucial brain development are actually changing the brain structure. The one structure of the brain in excessive Fortnite players that is visibly reduced in size in functional MRI's is the one related to expression of empathy.

Games designed to kill are those that diminish empathy.

## **Question 10**



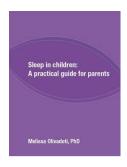
**Are Children Sleep Deprived?** 

Technology use has a direct impact on children's sleep patterns. Viewing the screen prior to going to sleep sends the wrong message to the brain. The setting of the sun was the sign the primitive man's brain received to excrete the chemicals in the brain that induced sleep. The reduced light sent a message to the retina that it was time to get ready to sleep. The rising sun sends a message to stop the production of the sleeping inducing chemicals. That is why our eyelids are so thin.



The screen glows in a way that disrupts this messaging. Children will sleep, but the chemicals they need for reparative sleep are not reduced by game playing. They may wake tired and agitated because they are not going into deep sleep. During the night our brains go through cycles of almost awake and easily aroused, to deep sleep that nothing wakes the sleeper. Each phase of sleep allows the brain to do its work. During sleep, it organizes

memories. It discards unused memories, and files those we have determined are important by our thoughts and actions. If children sleep in the middle of the cycle and never go deep, they will forget information learned the day before.



There are other reasons for poor sleep and suggestions for managing it in Melissa Olivadoti Ph.D.'s Ebook, <u>Sleep in Children available</u> at www.homeworkdoc.com

## Question 11: Are Your Children Aware of What Happens When Their Devices' Microphones Are On?

Everything that is said or searched by your children is being recorded. The information is being used to direct information to your children based on what is heard or seen in the search. Once children say they love baseball, suddenly their social media platforms are flooded with ads for merchandise or contests to enter related to baseball. My cousin mentioned she wanted a cake that see saw. She described it in detail and within five minutes, her Facebook page showed an ad for the exact cake and a store nearby that sold it. My colleague was discussing how he was telling his wife he needed a new pair of heavy duty boots for gardening. His Siri was on and within minutes, he got a bing on his phone indicating he had a message. The message was an ad for the exact pair of boots he was discussing with his wife.

Our children need to be aware that they are being heard even if their phone is not on. The only safe way of protecting our children is to turn off their microphones. Awareness will help them think about what they are saying, even in the comfort of their own home. Home used to be a safe place to discuss anything, This is not longer true.

#### **Chapter 12**

#### What Your Children Need to Know About AI

Artificial intelligence has been around much longer than most realize. It's been used to program space ships. That is a positive use of AI. What is of concern is how AI is used today. An important fact is AI is only as accurate as the programer that inputs the information. Programers bias can be reflected on the outcome of a search. It's important that children not believe everything that results from searches. They need to question who the author or authors are and their credentials. Using other sources such as books, magazines, and newspapers will help students check the validity of the results.

When my former students did research on an animal, they found conflicting information on different sites regarding how many offspring their animal would have each season. Viewing many different sources helped them report the most accurate information.

Too many students take for granted that he information they receive on one search is accurate. They don't consider there should be a variety views on one topic. One issue with AI generated material is in many cases, the information gleaned from the app has omitted important facts. Users need to consider using different search engines and internet browsers, because each will deliver different information. The AI generation of students need to be good critical thinkers and have to move away from immediate gratification and become effective researchers for the truth. A sign they need to be alerted to is *if they don't find a variety of opinions on a topic, something is wrong.* 

Users today need to be aware that AI has become so sophisticated that the biggest risk posed by it is believable fake news. According to an executive at Google, AI can created a video that uses a persons face and voice to say things the person never said. It can put this person in a place they never visited. AI has the capability to take words out of context and make it look believable. This is a great concern for many reasons. Politicians have used to defame their opponents. Who can we believe? I would safely say, no one.

Google is doing a slow roll out of AI bots because they rely on the feedback of users to report the challenges they haven't been able to predict. They are being reactive to make the AI Apps safe

instead of being proactive. So they often don't fix a challenge created by the intelligence until it has done damage. For this reason, *Users Need to Beware*.

I have said this earlier, but it bears repeating, the advice is that users believe nothing without doing research to discover its credibility. It is not truly the answer for immediate gratification.

Recently, a friend was encouraged to use ChatGPT to write speeches. Users traditionally are looking for quick ways out. Unfortunately, AI bots like ChatGPT are not reliable. In a 60 Minute Internet that is available on line, David Byrne tried to demonstrate how Bard, Google's app wrote an entire essay on economics, siting books on the subject. After researching the information, it was determined that the books that Bard recommended didn't even exist. Bard made it up based on information in the Internet. ChatGPT is free at the time of writing this book, because the creators are awaiting user feedback. Relying on an app to write papers, speeches, and do homework assignments is scary, because the information isn't reliable. It could be very embarrassing to give a speech that Bard wrote to specialists in the field if the speaker hasn't verified the information. Bard can offer ideas one wouldn't think about, but it will be up to a human to determine if its usable information.

One lawyer used an AI app to find cases that would disprove the guilt of his client. The judge was very well versed in the cases and was able to determine that no such case existed. He was fined severely and disbarred.

According to editor, Sabrina Ortiz, "For all of the good things you can do with OpenAI's new chatbot, you also need to be aware of the ways it could be used by people with malicious intent." She continues to share, "ChatGPT, like all language models, is not without limitations and can give nonsensical answers and incorrect information, so it's important to double-check the data it gives you. It's constantly learning from the text data it is provided by users and the results it finds online, which can make it prone to misinformation." Sharing this information with your children will empower them to not trust all AI generated material. It can offer different perspectives one who not think about, but still needs to be fact checked.

We all need to discuss the ethics around AI App Use. When a student puts in a request for AI to create an essay, report, speech, poem, or song they are cheating. They are misrepresenting what they actually know how to do independently. If the goal of school is to get straight "A's" at all cost, Then we are teaching children that there is nothing wrong with

plagiarism, or cheating. When they use the apps, our children are missing out on learning valuable independent skills they will need should the Internet go down. Relying on an unreliable source to do work that is assigned to an individual is risky, but more importantly, it is dishonest

### How Can You Help Your Children

- Wait to give children under 16 their own devices. They will be healthier and many parents are opting to do the same. They don't need them until they are driving. Then that is a separate set of dangers to consider.
- Provide your children with bully protection. Teach them to understand why children bully and what to say to bullies.
- Don't allow children to view sites you have not previewed.
- Help your children tap into their physical responses to stimulus.
- Teach your children about how the brain works and is affected by device use. My **Seven Secrets About the Brain** is powerful.
- Provide many discussion topics that are open ended and provide opportunities to hear a variety of opinions. Teach them how to disagree without being negative or argumentative. I taught my children to say, "I heard you say that the character in the book lost his shoe because he kicked the ball hard. I also think he might have lost the shoe because he didn't tie his laces tight enough."
- Make sure your children learn the importance of making eye contact during conversations.
- Teach your children the advertising strategies and propaganda techniques used by companies and politicians use to lure customers and votes.
- Teach your children effective time management strategies. My Homework Solutions
   Program and my Backwards Planning: The Cure For Procrastination have helped

children become successful time managers.

- Teach your children the purpose of filters on the computers. They are designed to keep strangers out of their computers.
- Teach your children to express empathy? Read stories and discuss how the characters feel.
- Make sure all devices are off at least 1.5-2 hours before bed and they are not stored in the room in which the children sleep.
- Guide children to question everything they see, hear, or read. If they don't find different views and opinions, they need to search for them. Everyone sees things differently, so only one view must be considered biased and needs to be validated with other views.
- Educate your children on how bots like ChatGPT and Bard work, so they don't trust them. They can use the AI generated information, but the information needs to be fact checked. I recommend asking an App to write a paper, then research the topic with your children and look for everything that is incorrect in the AI generated paper. Children love to find mistakes.
- Speak to your children about ethics. Character is what happens when no one is watching.
   Grades have become so important that children are using Apps so they get the grade. It's not ethical.
- Read Essential Skill for the 21st Century Student -The Question -The Answer is in the Asking

To learn more about educating your children to become savvy empowered students, check out my website for courses and helpful hints in my blogs at www.homeworkdoc.com Copyright 2020

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