

Nancy: Ian, thank you for talking some time to visit with us. We know what kind of schedule you are on, and finding a few minutes to sit down with you is great. You have been a regular contributor to the *Audio Journal* and one of our most popular interviews. So, let's start with your assumptions about digital kids. You state early and emphatically in your workshops and articles that kids today are fundamentally different. They learn differently, They process information differently and they respond differently. Let's start from there. Expand on your idea, your observations and the research that says today kids are fundamentally different then they were 20, maybe 30 years ago.

Mr. Jukes: That's a great question Nancy. You know, it's really deceiving! You look at kids today and you think, "Okay, maybe, maybe their hairstyle is a little bit different, but basically, they are the same as us", and that's just not the case. Kids today are different but not just because they might physically mature much earlier than we do - up to two years ago earlier than generations ago. Okay, not just because the clothes they choose to wear or clothes they choose not to wear, not just because they might want to dye their hairstyle differently than we do. It's not just because of the music they listen to, or the way they talk or what they say or how they act and not just because kids today seem to have more body parts than we did growing up that they want to pierce and/or tattoo and/or expose.

No! What I am talking about here is that, because of "digital bombardment" - because of the pervasive nature of digital experiences on children's lives today - the research is telling us quite categorically that our children's brains are quickly adopting and adapting to accommodate all of the new technologies they spend most of their time with, and that, as a result of that, this generation of kids have become "screen-agers," The first generation on the history of the world that is actually growing up with a mouse in their hands together with an assumption that images on a screen are supposed to be manipulated with and interacted with, it screens on just for passing consumption.

Like Marc Prensky says these kids have become "digital natives." They have grown up in a new digital landscape and, as a result of this chronic digital bombardment, digital becomes their language of choice, they speak "D.F.L.", They speak digital as a first language. It's their native language. It's the language they were born into. It's the language they feel most comfortable

speaking. And, as Prensky points out, this is a big problem and the reason is because most people of our generation, and certainly most educators, are not digital natives. They don't speak digital as a first language. They weren't born into the new digital landscape. Instead, we are "digital immigrants."

I don't want to consider this to be a negative term. We are digital immigrants because we come from another country - we come from a non-digital world, we come from a time and a place before digital technology essentially changed everything, and as a result of that, we have old country traditions and assumptions about the world. We speak, as I say, "D.S.L." We speak digital as a second language. We speak digital with varying degrees of an accent.

And while this may seem a little irreverent, a little silly, this is a huge distinction because new research as category they are telling us that because of this pervasive digital bombardment, because of the immergence of the new digital landscape, the brains of the digital generation have been affected. The brains of the digital generation have, and continue to, change both physically and chemically.

Our children and our students are actually neurologically wired different than we are, that they have developed what I call "hypertext minds", their cognitive structures, process information in a parallel manner not a sequential manner like we do. And but we don't yet fully understand the incredibly complex processes involved in thinking and learning, what we all need to understand is when we are born, we come into the world with only about 50% of our brain wiring in place to handle the critical initial functions and the other 50% of the brain wiring happens after birth.

And, you see, for the longest time, conventional wisdom is being that by the age of three that our brains were stable and from that point forward, our brains didn't really change and by the age of three, we all then had a fixed number of brain cells which then started to die out slowly, one by one, with no appreciable new cell growth. And as a result of that, the longstanding assumption is being that by the age of three we all had fixed memory, fixed processing power, fixed intelligence but essentially the brain you had by the age of three was the brain you are going to die with - and by the way - this was believed to be the case for all brains regardless of race, regardless of culture,

regardless of experience. We all used the same neuropathways or neuro-electronic circuits to process, to store, to utilize information.

However, because of a number of major scientific and technological breakthroughs over the course of about the last two years, almost all of our longstanding assumptions about this have been shown to be completely wrong. We have been able to use new scanning technology that we are able to demonstrate that, on the contrary to those assumptions, the brain is actually highly adapted, that it's highly invaluable. And the old idea that we had a fixed number of brain cells has been replaced by a research showing that our supply of brain cells is continually being replenished and then as a result of this, the brain is constantly reorganizing itself structurally throughout life based on two things.

First are the input or the experiences we have and secondly, it's a intensity and the duration of those experiences. Now this is incredibly important, because what it means is you can change your initial memory capacity, you can change neuroprocessing power. We can regrow neurons. And as a result of that, here is the big one, the intelligence that we are born with isn't fixed, that IQ actually rises and falls depending on the type and the duration of the stimulation to which our brains are exposed.

Nancy: There is a term that is used more and more often – what is it? – neuroplasticity. You use that word frequently in your workshops. What is that and why is it so important in understanding learning today.

Mr. Jukes: Another great question, Nancy. This process of the ongoing reorganization and restructuring of the brain, where neurons are constantly rearranging themselves making new connections and pruning unnecessary neurons in order to speed and reroute the flow of thought, is called - this is the term people should learn - it's called “neuroplasticity.” Literally, the brain is *plastic* and so, contrary to our longstanding assumptions about the brain, the brain is actually making new

connections and setting up new circuitry throughout our lives. And as a result of this, the brain is constantly creating new thinking patterns.

Nancy: But Ian, you also say there is a caveat here about neuroplasticity.

Mr. Jukes: The caveat here is that the brain doesn't just do this spontaneously. And that for the brain to become neuroplastic, it requires intensive, sustained, progressively challenging stimulation and focus that happens over extended periods of time. What we are talking about here is that it has to happen several hours a day, seven days a week. For example, when we all learned to read and write, it required that our brains be reprogrammed over extended periods of time. It had to happen several hours a day, seven days a week, in the very same way watching television for extended periods of time reprograms the brain.

But again, for this to happen, it requires that it takes place several hours a day, seven days a week. Now let's just pause for a second. Does the idea of exposure to something several hours a day, seven days a week - think about that - several hours a day, seven days a week, does that remind you of anything else that is increasingly happening in our children's lives today?

That it's actually been happening for a long time. And the obvious thing here is this is exactly what's been happening to digital kids' brains ever since 1974 and the arrival of the world's first interactive video gaming, it was called Pong. And of course in the years afterwards, there was Pac-Man, Donkey-Kong, Space Invaders, Grand Theft Auto, SimCity, the Sims, all the rest, okay?

And now here is an interesting trend the solo games which were the norm in the period before computers became network have mostly been supplanted by things like massively multiplier online role playing games, games like EverQuest, World of Warcraft, RuneScape, MapleStory, okay? And you see these experiences - these are digital bombardment. This is exactly, exactly what's been happening to digital kids' brains several hours a day, seven days a week. Many children today spend their entire lives surrounded by and using video games, DVD players, cell phones, iPods and a never ending list of inexpensive digital wonders.

What we need to do is we really need to stop and consider the implications of this constant exposure, this digital bombardment to these devices.

Nancy: So then Ian, tell us a little bit more about what happens with Neuroplasticity?

Mr. Jukes: Well, the metaphor we use here is the brain is like a tree. First there is a flurry of growth. The tree grows extra branches, extra twigs, extra roots and then the unused branches or pathways are eventually pruned away. And it's just pruning that gives the tree its shape for the future. This is exactly what it's meant by the old phrase "use it or lose it". The cells and the connections that are redundant or seldom used are actually removed. They wither and die.

As new neuronal connections form during the early parts of childhood, heavily used pathways become coated or insulated with something called myelin, which is a fatty insulating sheath that speeds signal transmission. Myelin boosts signal transmission speeds in the brain by more than 13 times which is a jump in speed analogous to switching your Internet connection from dialup to broadband. And you see, myelinated circuits also transmit 30 times more information per second giving them not only greater speed but also greater bandwidth.

So, if a student who is only doing music or only doing sports or only doing academics, those are the cells in the neuropathways that become hardwired and insulated. However, if that very same student is lying on a couch or playing video games or watching TV, those are the cells and the connections that are going to flourish. The most useful connections develop into neural networks as a result of regular exposure, or if the connections aren't useful they are pruned away.

And the point here is that as a result of this today, even amongst our youngest children, regular exposure to a multitude of inexpensive digital devices and gadgets that facilitate things like hypertext, interactivity, networking, random access and multitasking this exposure - this digital bombardment - is literally wiring and then rewiring kids' brains on an ongoing basis and particularly, it's enhancing their visual memory and their visual processing skills.

As a result of these digital experiences, what researchers are now beginning to conclude is that our students, our children, actually process the very same information we do but they would process it differently than we do.

Nancy: Ian, what is the research telling us more specifically about the impact all this digital bombardment are having on the way the students or children learn?

Mr. Jukes: The research is telling us is that digital natives, for many of the thought process they go through, use dramatically different neuropathways to take in, to process, to store and here is the important part to utilize much of the same information we do. We see this particularly in an area of the back of the brain called the visual cortex.

Now, let's put this into perspective. The average video game for example takes about 40 hours to play and master. The complexity of the puzzles and the objectives grow steadily over time as the game progresses. A recent study by the University of Rochester has found that visual processing skills dramatically increase with as little as 10 hours of game play and it goes further than this, okay? A brand new 3M study says that if you were to present 100 photographs to people of different generations, the digital natives those who are grown up in the digital landscape, they would be able to recall the content of about 90% of those images.

Meanwhile people of our generation - the digital immigrants - we would only be able to recall about 60% of the content of the same photographs. Meanwhile, people of our parents' generations, the people we affectionately call the "digital dinosaurs", the people who grew up in a primarily text and audio world who got with radio, they would only be able to recall about 10% of the content of those same images.

Now, this same research further says that the eye actually processes and interprets photographs 60,000 times faster than it processes text. And the reason is that the brain is much more designed, much more aligned to processing the visual information than anything else and that's because the nerve cells that are allocated for visual processing account about 30% of the brain's cortex compared to about 8% for touching, about 3% for hearing. It is completely natural; it's

completely normal for today's students might be far more inclined towards visual processing than text processing.

Now this study goes further because it says because digital natives think graphically that the eyes of digital natives actually move differently than the eyes of digital immigrants when it comes to scanning a page and reading material, the eyes of the old generation unconsciously find an intersection about $1/3^{\text{rd}}$ of the page down and $1/3^{\text{rd}}$ of the page in from the left side, the Greeks call this the "Golden Mean".

And then what we do is we read in a "Z curve", a complex Z curve if there is lots of information or a simple Z curve if there is only a small amount of information. But this new research is telling us that digital natives don't do that, they don't read that way. Their eyes unconsciously skim the bottom of the page first and then they focus on the sides or the edges of the page before they focus on the top left center of the page.

If you can go to my website, you can download a handout. It's got a picture of a thermographic print. The darker the color the more the reader is focused on the information on that area. And as you will see in that print, digital natives typically unconsciously ignore the right side and the bottom half of the page and will only go there if they are highly motivated. Now, it goes beyond that because specific colors of text attract and repel digital natives when they are reading information. When we are reading text, we get really uncomfortable unless we read it in any other color but black. For digital natives this is different. The color that attracts the most is blood red, followed by neon green, followed by burnt orange. And the color that their eyes unconsciously ignore is black. Now, do you think these findings might have any implications for strategies that we may be wanting to develop to help these kids to become better readers?

Nancy: Ian, another leading edger researcher and consultant in this area, Eric Jensen, also has some very interesting research and some dramatic conclusions that you also quote on your presentations. Maybe you can cite some of them?

Mr. Jukes: According to Eric Jensen, at least 87% students in any given classroom are not auditory or text-based learners increasingly because of digital bombardment, because they think graphically, because they have grown up in this new digital landscape, they are either visual or they are visual kinesthetic learners. They are visual kinesthetic - not because they are trying to drive us crazy - but because they are digital natives and that they are neurologically wired for multimedia and yet as Jensen points out, the very largest proportion of questions on test and exams in the States today continues to be based primarily on text and vocabulary.

Now, according to writer Marc Prensky, by the time this generation - this digital generation - reaches the age of 21, they will have, on average, played more than 10,000 hours of video games. They will have sent and received more than a quarter of a million e-mails and text or instant messages. They will have spent more than 10,000 hours talking on the phone. They will have watched more than 20,000 hours of television and 500,000 commercials.

As Prensky points out, almost none of these are experiences that we or parents' generations had while we were growing up. Now, my question would be, "Do you think these kinds of experiences, this kind of digital bombardment might have any impact on the way they think? on the way they learn? On the way they do the work?" Because as Prensky points out, the very same time these same kids will have spent less than 9,000 hours attending schools, less than 4,000 hours reading and much of that time is spent unengaged or under-engaged.

And here's the point - what I believe is that because of this constant digital bombardment, what we now as educators need to acknowledge is that digital kids actually process information differently using different parts of the brain than people of our generations do and - by the way - , the good news-bad news here is that they were beginning to see an accelerated gap between the brains of the younger generations, between the brains of teenagers, tweenagers and younger children.

Because these kids look pretty much the same as we did growing up outside, it's really hard as parents, as citizens, as educators to comprehend how much change is really taking place. But if you understand even just a little bit of what I have just laid outright here, that may help explain, at

least in part, why kids act differently, why they respond to things the way they do, why they view the world the way they do and it might help at least in part to explain some of the fundamental difference between their generations and our generations.

Now, I am not saying, categorically, I am not saying that this means that we need to abandon everything that we have always done in education and honor digital learning preferences entirely. What I see this is it as a matter of “either - or” What we need to be able to do is we need to continue to promote, to support the traditional learning that that’s how you transmit your culture from one generation to other generation. But, you know, what if we want to leverage digital learning preferences? If we want to leverage digital learning styles, then what we are going to have to do is we are going to have to get to understand what’s going on inside these kids’ heads and what we are going to have to be able to do is use those digital learning preferences in order to be able to teach differently so that what we can do is get the “hook” into these kids so we can get these kids and we can energize them and inspire them.

See, my observations are that right now, we are literally using standardized test to measure non-standardized brains. We literally trying to fit round pegs into square holes. It’s not that these kids are ADD, it’s not that these are ADHD. It’s that they are just bored and they are just not listening. They are not just engaged and they are turning us off. And what we have to be able to do is we have to be able to find the way that we can engage these kids against anybody who knows anything about the class, who knows the secret of success in the classroom has far or less to do with being a policeman than having an engaging methodology - something that inspires the kids, that hooks the kids, that wants them to be there. So the question I want to ask you is, Would your kids be there in your classrooms if they didn’t have to be in your classrooms?, Are those kids there because they want to be there or they are there because they have no other choice, because they have to be there? And, if they are only there because they have to be there, what can we do differently, to inspire them to want to be there?

Nancy: This seems to sum up nicely your major point – they learn differently thye we did ,yet they are taught fundamentally in the same ways as we were.

Mr. Jukes: Nancy, I have been described as a person who has never been alone -- someone to talk to, even if I was completely by myself and I could spend hours talking about this. But let's basically try to quantify and qualify digital learning preferences as opposed to traditional teaching preferences.

You see, digital learners typically prefer to receive information quickly from multimedia sources. Many educators prefer slow and controlled release of information from limited sources. Today's generation operates at what Prensky calls "Twitch Speed," due to a constant exposure to video games, hypertext and all of the other aspects that reflect an increasing digital world. Then, as a result, digital kids have had far more experience of processing information quickly than we do and they are better at dealing with high-speed information than we are.

To coin a phrase from the movie *Top Gun*, digital natives have a need for speed, but many teachers only feel comfortable processing information at conventional speeds. So, after spending hours of their lives before and after school playing video games and wandering around virtual worlds, they literally run into a wall when they come to school. The second point would be that digital learners prefer parallel processing and multitasking. Meanwhile, many educators prefer singular processing and single or limited tasking. You see, from the earliest times, we have always been able to multitask. It's called "continuous partial attention" randomly toggling between tasks, deciding which one to do next.

We do that when we are driving a car, while listening to music, while thinking about things - but now it happens faster. I remember my parents coming into my bedroom and telling me to turn off the radio because I was supposed to be studying, okay? And we were told that the best way to study was to isolate ourselves from the television, the tape player and the busy sidewalks outside the window, we were to clear a nice study corner with a comfy chair, good lighting and ample workspace.

You walk into a kid's bedroom today. They are sitting at the computer. They are doing their homework. They are listening to music. They are burning a CD. They are searching for something online. They are watching *American Idol* or simultaneously managing 14 instant messenger

conversations and they are still bored! And, many students will tell you quite categorically that doing that all at the same time helps them concentrate.

The third thing is that digital learners prefer processing picture, sound, color and video before they process text. Meanwhile, many educators prefer to provide text before picture, sounds and video. You see, for generations, graphics were generally illustrations accompanying the text and providing some clarification for the text. For digital natives, the relationship is almost completely reverse. The role of text is to provide more detail for something that was first experienced as an image. Since childhood, the digital generation has continuously and constantly been exposed to television, videos, computer games that put colorful, high quality, highly expressive graphics in front of them with a little and all accompanying text.

The result of this experience has been to considerably sharpen their visual abilities. They find it much more natural than our generation to begin with visuals and to mix text and graphics in a richly meaningful way after the fact. That's why we need to go from what we call the "three R's" to the "four Rs." The three Rs? Reading, writing, 'rithmetic. The four Rs? Reading, writing, 'rithmetic, and art, because kids today need to be able to communicate as affectively in the graphical environment as we were trained to communicate in the text-based environment.

What is the next one? it's the digital learners prefer random access, the hyperlinked multimedia information or many educators still prefer to provide information linearly, logically and sequentially. Buckminster Fuller many years ago wrote "how often I saw where I should be going by setting out for somewhere else". The under-30 generation is the first to experience hypertext and clicking around. You find this in computer applications and CD ROMs on the web, and, you see, this new information structure has increased their awareness and their ability to make connections and has freed them from the constraint of a single path of thought and it's generally, I believe, an extremely positive development.

At the very same time it can be argued with some justification that unlimited hyperlinking may make it more difficult for students to follow a linear train of thought and to do some types of deeper logical thinking. There is a lot of kids who would think, "Why should I read something from

beginning to end or follow someone else's logic, when I can just explore the links and create my own?" Well, while following one's own pathway often leads to interesting results. Understanding someone else's logic is also very important. So, this is not a matter of "either-or".

What's the next point? it's the digital learners prefer to network simultaneously with many others. Well, many educators prefer to work independently before they network and interact. You see, when we were students, we were expected to, at least at the beginning, when new information was being introduced, we were expected to work independently. When we were out of school, the only way we really communicated with the others was either face-to-face or by phone. You see, digital natives are so grown up with dozens and dozens of ways to communicate, cell phones, MySpace, Friendster, Facebook, blogs, instant messaging and so on. They need, they want, they expect to be able to communicate with others. These are what we call "weapons of mass collaboration".

The classic example of this would be basically, give a new game to a kid, give them a new device, what's the first thing they do? Do they read the manual like we would? Absolutely not. They would spend 10 minutes messing around with it, during that period of time, they would figure out 10 things that work, 10 things that don't work and then what they do is they go out to the Internet for blogs, they go to message boards, they Skype their friends in order to be able to find out the cheats, the way that they can get better with this.

What's the next point? It's the digital learners prefer to learn "just-in-time". Many educators prefer to teach "just-in-case". Schools are organized around just-in-case. Just-in-case it's on the exam. Just-in-case you needed to pass the course. Just-in-case you want to become an engineer.

Digital learners prefer to learn "just-in-time". They want to gain an understanding of the things that they will need to know to allow them to acquire the necessary skills and knowledge just-in-time to play the game, to solve the problem or do something they don't know how to do. Just-in-time learning is about these kids having the skills, knowledge and habits of mind that will allow them to learn quickly just-in-time when that next brief window of opportunity or area of interest opens to

them. Digital learners prefer instant gratification and immediate rewards. Many educators defer the gratification and delay the rewards.

You see the digital culture provides exactly what kids need and want most. What is it, constant affirmation, lots of attention, and the desire to be able to distinguish themselves, games and digital technology tell the user that if they put in the hours, if they master the game, they're going to be rewarded with the next level, with a win, with a place on the high scorers' list. What they do determines what they get, and what they get is worth the effort they put in, obviously, if they're going to spend that much time doing it. New technologies excelling giving feedback and the payoff for any action is typically extremely clear.

Compare how often digital natives are rewarded in games. The research is every 7 to 10 seconds - and, by the way, they are asked to make a decision every one half second. And then compare that with how often kids are positively rewarded in schools and that may be one of the reasons why there are a lot of kids these days who were waiting for the Internet version or video game version of school to come out so they don't have to go to school anymore.

The next one is that digital learners prefer learning that is relevant, active, instantly useful and fun. Many educators feel absolutely compelled to teach for the curriculum guides and to prepare for No Child Left Untested – I am sorry, No Child Left Behind, no superintendent left standing, okay. Well, often to write in the press as being intellectual slackers. In reality, digital natives are actually very much an intellectual problem solving generation, many types of logic challenge and puzzles, special relationships and other complex thinking tasks are built into the computer and built into the video games they enjoy. Well, some of them argue that playing games are simply preparation for work, for today's younger generation play is work and work increasingly is seen in terms of games and game play. They want the learning to be relevant. They want their learning to be relevant and instantly usable. Basically, you have heard kids say all the time, "What possible connection does this content, does this piece of learning have for me and for my world?" and more than anything else they don't see why this can't be fun most of the time.

Nancy: Well Ian, how do we understand these digital natives that you keep talking about? How can we understand them better? What advice do you have for us?

Mr. Jukes: If you want to get a snapshot of their world, if you want to get inside their heads, there are a few things you can do. The very first thing I would recommend is you go out online and read the adventures of teenager Jeremy and his long suffering digital immigrants parents in a cartoon strip called Zits. The people who created this cartoon strip are absolutely on the money and start showing you what's going on inside kids' heads.

The next thing you can do is you can play video games, even if they do kick our butts all over the block, we need to be willing to explore their online role. We've got to go out there and take a look what digital natives are doing with video on places like *YouTube*, a hundred million unique visits every single day, a hundred thousand new videos there. You need to take a look at MTV's website called *The End* and learn about the absolutely latest digital trends for teens it's called Vomenting, visual commenting, where they add commentary and video via text blurbs or audio clips, the streaming video. You could learn to write a Wiki. You could download and then create a podcast. If you create a blog, you can learn how to use instant messenger. You could learn how to Skype. You could play Massively Multiplayer Online Role Playing Games. You could create a personal avatar and then go out there and lean virtually its second world. You could become a thumbster. You could open a MySpace account.

And if you have no idea what I have just been talking about for the last few minutes then basically what you have done is you have defined the true digital divide, you have defined the gap, you have demonstrated your true digital immigrants status. A divide that I believe is much less about "have" and "have nots" or "no" and "no nots." The real digital divide today is a generational divide, a culture clash between their generations and our generations.

Nancy: Ian, in my opinion, what you do as well as any speaker or consultant out there is provided additional resources to further understand your main points. There seems to just be a lot of research in the area of brain learning going on right now.

Mr. Jukes: Well, there is so much going on here. I work really, really hard to trying to keep on top of the stuff. I read 400 to 500 online articles every two weeks. And this stuff is absolutely overwhelming me. What the first thing you can do is you can go out to the Audio Education [website](#) and there are two handouts that I will put up there, download of very substantial handouts. One of them is called *Understanding Digital Kids*. The other one is called *New Visions for Teaching and Learning*, because one of the things that I know that your listeners want to have is tangible concrete things that they can do that they can translate from vision into practice.

The 3rd thing that I would recommend they get is they go and buy a book, the book is called Teaching for Tomorrow, it's by Ted McCain. And I am assuming, Nancy, that you will be able to put that information out on the website, but this is an absolutely fabulous book written by someone who is clearly an educator and spends his time in the classroom. This book is written in English and about 75 pages what Ted McCain does is he absolutely lays it out, step-by-step: Here is how you continue to focus on improving test scores being able to get that content recalled that's required. But, at the same time, here is how you can honor digital preferences, digital learning styles and here is how you can embed those 20% illiteracies, those 20% skills that information processing, information literacy, critical thinking, problem solving, all those things can be embedded. The wonderful thing about this book is again, it is so simple, it is step-by-step, it is absolutely the best resource that's out there on the market today.

Nancy: Ian, we are pretty much running out of time so the last question - what is it that you want this school administrators to come away with after hearing your presentation on the Digital Kids.

Mr. Jukes: It's the very same things that I said at the very beginning of this interview and that is that we need to acknowledge that kids are different. You know, when you hear people talking about this, we tend to nod our heads, "Aha, aha, these kids are different", but you know what, what happens is we go back into the classroom, when we shut the door it could just easily be 1960 all over again. See, intellectually, we know that it's a different world. Intellectually, we know these kids are different.

But as the old saying goes, when the going gets tough, the tough gets traditional. And what we can do at an unconscious level is we can end up absolutely reverting back to the way that things have always been done. If we want to be able to leverage the power of digital learners, if we want to be able to leverage these digital skills, what we have to be able to do is understand that we can't just do the same things differently, what we are going to have to do is we are going to have to do completely different things and what we are going to have to do is we are going to have to honor how these kids learn. Every generation since the time of Socrates has looked at the next generation, including our parents looking at our generation and saying, "What's wrong with these kids, okay, there is nothing wrong with these kids, there are not ADD, they are not ADHD. What they are is they are different and that's what you need to come away from this interview with.