

Session 157 – Gene Brewer & Deb Fetch

Removing Learning Inhibitors that Place Students at Risk

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Presenters:

Deb Fetch and Dr. Gene Brewer



Leading centers for an ever-changing world

If you had to make a choice ...

We have become so used to living in a fast-paced technological world, we often fail to realize how addicted we are to today's inventions and gadgets connecting us to the world and each other.

So what if you had to make a choice? ... What would you choose if you could only have **one** of the following in your life?

Cell phone



Computer/
Internet



Vehicle



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The Age of Instant Communication

It is now possible to communicate almost anything, in almost any form, almost instantly, to almost anyone in the world. Faxes can be sent in three dimensions. The Internet opens up the whole world to a child — one with its own rules, justice, language, and culture.



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Today's adolescents...

Take today's adolescents and somehow let time run backwards to deprive them of all devices that are in some way dependent on electricity and technology.



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Today's adolescents...

One by one, we remove the cell phone, MP3 player, the iPad, the iPod, LCD TVs, the smart phone, the Internet, the computer, the DVD player, the radio, electronic games, airplanes, air conditioning and automatic heating, shopping in large malls, and the opportunity to acquire large numbers of possessions.



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Today's adolescents...



How well could our adolescents cope? How would their lives be different? And what about our own?



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Today's adolescents...

New technologies and the entertainment industry, combined with changes in family structure, have more deeply isolated grown-ups from teenagers. Kids have less access to parents, more access to potentially damaging information.

Today's teens command an electronic landscape more stimulating, vibrant and mysterious than any before. They are the masters of the new domain.



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—Newsweek

Learning Inhibitors that Place Students at Risk...

In this session we will examine:

Decline of the Family
Media
Advertising
Bullying
Internet Dangers



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The typical 8 - 18 year old lives in a home with an average of:

- 3.5 TVs
- 1 in 4 live in homes with 5 or more TVs
- 8 in 10 have cable or satellite TV
- 55% get premium channels such as HBO
- 2.9 VCRs/DVD players
 - half live in homes with 3 or more
- 34% have digital video recorders
- 2.1 video game consoles - half have 2 or more
- 1.5 computers
- 3.6 CD or tape players
- 3.3 radios



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—Kaiser Foundation - Generation M: Media in the Lives of 8 - 18 Year-Olds

In the bedrooms of 8 - 18 year olds:

- Two-thirds (68%) have a TV (boys - 72%, girls - 64%)
- 54% have a VCR/DVD player (boys - 59%, girls - 49%)
- 49% have a video game player (boys - 63%, girls 33%)
- 31% have a computer (boys - 35%, girls - 26%)

When they leave home:

Almost two-thirds (63%) have a portable CD, tape, or MP3 player

Half (55%) have a handheld video game player



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Variations In Family Structures...

- 1960 census form had four (4) family structures to check-off
- 2000 census form originally had twenty-four (24) family structures to check-off, but created so much controversy, this category was taken off the form
- Nearly 4 in 10 babies are born out of wedlock



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U.S. Census Bureau Report...

- Households headed by unmarried partners grew by almost 72% during the past decade
- Households headed by single mothers increased by more than 25%, and those led by single fathers grew by almost 62%
- For the first time ever, nuclear families dropped below 25% of households past decade
- A third of all babies were born to unmarried women (33%) compared to only 3.8% in 1940



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Variations In Family Structures...



From other studies we know that co-habitation has increased by 1,000 percent from 1960 to 1998. We are also seeing a growing number of unmarried women in their 20s and 30s who are choosing to bear and raise children alone.

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The Unexpected Legacy of Divorce

Dr. Judith Wallerstein in *The Unexpected Legacy of Divorce: The 25 Year Landmark Study*, followed boys and girls of divorced families for 25 years. Her recent book revealed that 40% of her subjects never married, compared with 16% of children from intact families. Clearly, the impact of family breakups is a lifelong affair.



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Effects of Divorce

- 90% of children suffer from an acute sense of shock when the separation occurred
- 50% felt rejected and abandoned. Half the fathers never came to see their children three years after the divorce
- One-third feared abandonment by the remaining parent
- 66% experienced yearning for the absent parent with an intensity that researchers described as "overwhelming"
- 37% of the children were even more unhappy and dissatisfied five years after the divorce than they had been at 18 months



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Brain plasticity...

Neuroscientists now know that the brain's plasticity means there are times when **negative experiences, over stimulation, or the absence of appropriate stimulation** are more likely to have serious and sustained effects.



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Windows of Opportunity

Windows of Opportunity as a Child's Brain Matures

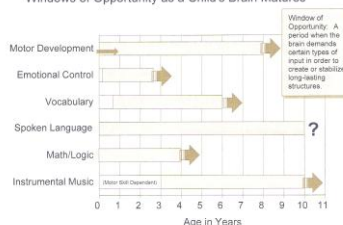


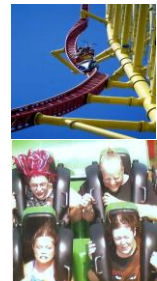
Figure 1.5 The chart shows some of the sensitive periods for learning during childhood, according to current research. Future studies may modify the ranges shown in the chart. It is important to remember that learning occurs throughout our entire life.

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Prefrontal cortex...

One of the last parts of the brain to develop is the prefrontal cortex.

This, not hormones, attitude, and the need for independence, is the cause for the emotional roller coaster ride adolescents go on, and often take adults with them.



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Prefrontal cortex...

The **prefrontal cortex** – often referred to as the **CEO of the brain**, is the region of the brain directly behind the forehead that **helps a person organize complex thoughts, control their impulses and understand the consequences of their own actions.**

Functions of the prefrontal cortex

- Impulse control
- Stopping inappropriate behavior
- Shifting/adjusting behavior when situations change
- Knowing when an activity/conversation is completed
- Organization/Setting priorities
- Planning ahead
- Making decisions
- Foreseeing consequences
- Managing emotions
- Reading emotions
- Insight/Assessing risks

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Adolescents' World Today

- ▶ Parents and adolescents spend most of their waking hours apart
- ▶ Adolescents' world is more connected, more competitive, and more complex than their parents'
- ▶ Technological gap exists between parents and adolescents
- ▶ World today sexualizes adolescents and immerses them in adult images and messages earlier and earlier in life



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What is Adolescence?

According to numerous researchers, adolescence begins around age 6 to 8 with increasing skeletal growth, includes the 4 to 5 years of puberty that begin around age 12, and continues with rapid changes in the brain that aren't complete until the early twenties.



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What is Adolescence?

Adolescence is a time when children are attempting to learn and understand the world around them, other people, and social rules.

It is an emotional, sometimes overwhelming, time of separating from one's family origin into a separate person.

This often painful period when everything is in flux: personality, identity, socialization, emotional control, and logical thinking, is also a time when some major areas of the brain undergo dynamic development and alterations.



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What is Adolescence?



In adolescent girls, the prefrontal cortex reaches its maximum thickness by the age of 11 and, **for the next decade or more, continues to mature.**

In boys, this process is delayed by 18 months.

—Jay Giedd, National Institute of Health

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Media and Advertising



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Today's Young People:



Live media-saturated lives, spending an average of nearly $6\frac{1}{2}$ hours each day with media ... an amount equivalent to a full-time job with a few extra overtime hours ($44\frac{1}{2}$ hours per week).

30% either talk on the phone, IM, watch TV, listen to music, or surf the web for fun "most of the time" they're doing homework — another 31% say they do it "some" of the time.

26% of the time they are using more than one medium at a time (overlapping), actually exposing them to the equivalent of $8\frac{1}{2}$ hours a day, packed into $6\frac{1}{2}$ hours of time.

60% of those with computers at home say their TV sets are located where they can watch TV while using the computer.

ED —Kaiser Foundation - Generation M: Media in the Lives of 8 - 18 Year-Olds

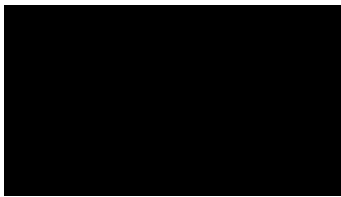
Today's young people spend more time watching TV (15,000 hours) than they do in school (11,000 hours).

During an average year,
American youth are exposed to:

- more than 14,000 sexual references and jokes, yet less than 175 will deal with self-control behaviors
- more than 1,000 murders, rapes, assaults, and armed robberies
- between 1,000 and 2,000 beer and wine commercials
- nearly 40,000 commercials

ED —Department of Pediatrics Children's Hospital of Iowa, The University of Iowa

Onslaught



What Are Young Minds Learning From the Media?

- It's what's on the outside that counts
- Relationships are built on physical attraction, not on who the person is or what he/she stands for
- Solutions are found in bottles (drugs, alcohol)
- Delayed gratification is not valued
- Families are fragmented; parents are either indulgent or absent
- Violence is a solution
- Sex has few negative consequences



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Adolescents and sex

- 10% of all 13 year olds have had sexual intercourse
- By the time they finish high school, over two-thirds of all adolescents have become sexually active
- 14 % have had four or more sexual partners
- Over half of all high school students have engaged in oral sex, of which most do not believe is "sex"
- Every year, 1 in 4 sexually active teens contract an STD, of which more than half have no symptoms (35% of 13 - 19 year olds are estimated to have HPV)
- 13% of all US births are to teens
- 3 in 4 teens ages 15 - 17 have never had a discussion about how to say no to sex, birth control, or STDs with a parent or guardian

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From the National Violence Prevention Resource Center...

- * 61% of TV programs contain some violence.
- * Only 4% with violent content feature and "antiviolence" theme.
- * 44% of the violent interactions involve perpetrators who have some attractive qualities worthy of emulation.
- * 43% of violent scenes involve humor either directed at the violence or used by characters involved with violence.
- * Nearly 75% of violent scenes feature no immediate punishment for or condemnation of violence.
- * 40% of programs feature "bad" characters who are rarely punished for their aggressive actions.

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TV, video games and violence...



Two studies show that TV violence activates the amygdala, the sensitive anger center of the brain. Another important study done by the Albert Einstein College of Medicine, found that violent video games increase levels of aggression hormones in teen players.

While their onscreen personas kicked, punched, cut, and shot their way through enemies, testosterone and adrenaline levels rose significantly in the bodies of the players behind the controls.



—Walsh, Why Do They Act That Way?

Violent programming, including cartoons, can have a negative impact upon children.

Viewing violence can:

- * contribute to a child's aggressive behavior
- * desensitize a child toward violence
- * decrease a child's sensitivity toward victims
- * increase a child's fearfulness about the world
- * teach that violent acts lead to success
- * decrease cooperative play and work
- * increase acceptance of gang behavior
- * undermine the development of humane social values



Excessive Television Viewing and the Ability to Learn

- The American Academy of Pediatrics (AAP) urges parents to avoid television for children under 2 years old.
- During the first 3 years, a critical time for brain development, TV can get in the way of exploring, learning, and spending time interacting and playing with parents and others, which helps young children develop the skills they need to grow cognitively, physically, socially, and emotionally.
- The rapid-fire change of television images occur:
 - Every 5 to 6 seconds in most programs
 - Every 2 to 3 seconds in commercials
 - even less on MTV
- It takes anywhere from 5 to 10 seconds to engage the neocortex, our higher brain, after stimulus. Television does not give the neocortex the needed time to process images.



Excessive Television Viewing and the Ability to Learn

Multi-leveled sensory deprivation:

Television watching presents information in only two senses: hearing and sight.

Reading Problems:

The visual system - the ability to search out, scan, focus, identify whatever comes in the visual field - skills needed to be developed for reading, is not stimulated properly when watching TV.

Attention Span Problems:

The Reticular Activating System (RAS), the gateway to the left and right hemispheres that determines what we pay attention to, concentrate and focus on, does not operate well when a child watches TV.

Social and emotional growth:

Brain size has been shown to decrease by 20 - 30% if a child is not touched, played with, and talked to (Healy).



Advertising...



- Kids recognize logos by eighteen months
- Before the age of 2, they're asking for products by brand name
- By 3 to 3½ children start to believe that brands communicate their personal qualities, for example, that they're cool, or strong, or smart
- The typical first grader can evoke 200 brands
- McDonald's attracts 8% of the American population every day, and a 1/5 of their business is in Happy Meals
- By age 8 Budweiser commercials are the consistent favorite

—Born to Buy: Schor

Pitching Fast Food To Kids



Advertising...



Research shows that children under the age of eight are unable to critically comprehend televised advertising messages and are prone to accept advertiser messages as truthful, accurate and unbiased. This can lead to unhealthy eating habits as evidenced by today's youth obesity epidemic.

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Advertising...

More than 60% of us are overweight, and the percentages of us who are considered obese has nearly doubled since 1980. The rates of obesity among children has tripled in the past 25 years.

Health-care providers say they are seeing something of an epidemic of potentially lethal Type 2 diabetes, once known as an adult-onset version of the disease, among children as young as 10 and 11.



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Advertising...



The prevalence of eating disorders in this country is paradoxical. At a time when obesity is at epidemic levels, we have a parallel epidemic of anorexia nervosa, bulimia, and other eating disorders. These epidemics mirror our cultural confusion about food.

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Advertising...



We deluge kids with super sized portions of high-calorie junk food as we simultaneously glorify unhealthy, unrealistic thinness. We entice kids to eat till they are stuffed and then tell them they are ugly if they are not supermodel thin. It's no wonder that so many Americans get stuck in one or the other extreme and that so many teens suffer from eating disorders.

—Walsh, Why Do They Act That Way?

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Types of Bullying

Physical Bullying:

- Hitting, punching, choking, kicking, pinching, scratching, spitting, biting, destroying property or clothes
- Most visible so most identifiable
- Accounts for only one-third of incidences



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Types of Bullying

Verbal Bullying:

- Name calling, belittling remarks, defamation of character, taunting, racist slurs, malicious rumors, false accusations
- Most common form
- Dehumanizes



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Types of Bullying

Relational Bullying:

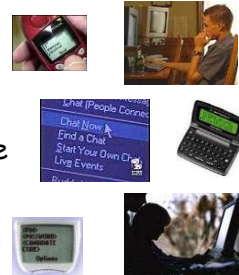
- Ignoring, excluding, isolating, or shunning
- Can involve gestures and hostile body language
- Diminishes sense of self
- Most difficult to detect from the outside



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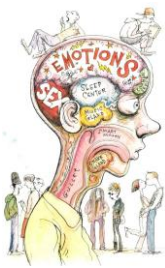
Cyber Bullying

Bullying has spread from the playground to the Internet



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Behavior



Social behavioral changes occur during the teen years. The reasons are not simply hormonal. The brain is still growing at this stage, and peer pressure plays a big role in shaping the adult the child is struggling to become.

U.S. News

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Let's Reminisce

Think back to your teen years ...

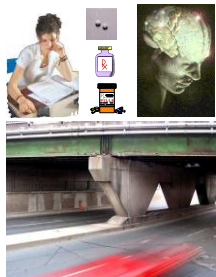
What was (that) one thing you did as a teen (risky, down right stupid, etc.) that you look back on now and think, "**I can't believe I did that!!!**" (You know, the one you would have died if your parents would have found out about!)



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The adolescent brain

Peer pressure is at a high, hormones are raging, and impulses are firing left and right. The adolescent brain has yet to develop the "brakes" portion needed to slow down emotions, think ahead, and think rationally.



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The adolescent brain

The results? Some otherwise intelligent teens doing some stupid stuff, including experimentation with drugs and alcohol, self-injuring such as cutting, racing cars, playing chicken with traffic, unsafe sexual practices, acts of aggression or violence, petty crimes such as theft, etc.



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Prescription drugs

According to the Partnership For Drug Free America, half the nation's teens have gotten high on prescription drugs and cough syrup.

Surveys of today's teens reveal they are more likely to abuse prescription drugs than experiment with illegal drugs.

They assume prescription drugs are safer to use and, thanks to home medicine cabinets and Internet access, find them to be more easily available than illegal drugs.



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Prescription drugs

The National Center on Addiction and Substance Abuse (CASA) at Columbia University recently released a comprehensive report on the abuse of prescription drugs in America.

The most disturbing finding in the report was the astounding increase in the number of twelve to seventeen year olds who abused controlled prescription drugs.

According to the report, controlled prescription drug use by teens rose 212% while the number of adult users rose 81%.



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The Internet: Opportunity ... or Danger?

The Internet has become a major "social component" in the lives of today's adolescents. For many, usage has become excessive and obsessive.

With the touch of a key or the click of a mouse, the Internet opens up the whole world to an adolescent... a world with its own rules, justice, language and culture. And while adolescents are reaping many benefits from today's technology, they also face many new challenges and dangers due to the enormous power which technology places in people's hands.



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The Internet: Opportunity ... or Danger?

If we think of today's generation of students as Digital Natives, then our educators are Digital Immigrants. The use of technology has enabled Digital Natives to be better at taking in information, make decisions more quickly, multitask and parallel process, and think graphically rather than textually. Digital Immigrants will never understand or use technology in the same way the Digital Natives do.



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Internet Dangers/Risky Behavior

- Cyberbullying
- Posting Personal Information/Pictures:
 - IM, Chat Rooms, Social Websites, Email, Blogs
- Predators/cyberstalking
- Pornography
- Prescription Drugs Access
- How-To Sites:
 - Proana, Suicide, Cutting, Bombs
- Anti-social/Hate sites
- Plagiarism
- Illegal Downloads:
 - music, videos



friendster.

myspace.com
a place for friends

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Cyberbullying:

The use of technology to degrade, harass, humiliate, or threaten another person, often anonymously, any time of the day or night.

Sending mean or threatening messages: IM, Text Messaging, Chat rooms, Social Websites, Blogs, Gaming sites

Posting personal information or humiliating pictures of the victim for anyone to download or view

Signing victims up for emailing and marketing lists, especially to porn sites

Polling websites that offensively rate others

Stealing password of the victim/posing as the victim.

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Terrifying Statistics - ignorance is NOT bliss

Teens on the net:

- 71% reported receiving messages online from someone they didn't know
- 30% have considered meeting someone that they have met online
- 14% have met a person face to face after meeting the person on the net (22% for 16 and 17 year olds)
- 1 in 7 teens has had unwanted sexual solicitations and 1 in 3 exposed to unwanted sexual material (79% of the solicitations took place on the home computer)
- 38.3% of adolescent girls have been "cyber-bullied" and 11.2% were threatened



Terrifying Statistics - ignorance is NOT bliss

500,000 teenagers attempt suicide each year

1 in 5 teens has admitted abusing prescription drugs and the internet is a prime source with over 300 online pharmacies that only require a credit card to purchase prescription drugs

56% of the teens find it easier to buy off the internet - and it is growing at 3x the rate of any other sector

Average age kids start drinking is 12.94 years old - with the net being a key

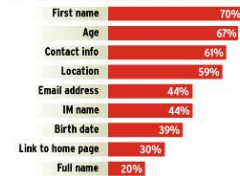
40% of teen chat is with someone they only know online



Revealing kids

Revealing kids Child bloggers often post plenty of personal details on their web sites.

DISTRIBUTION OF DISCLOSED PERSONAL INFORMATION

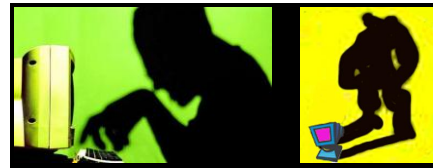


SOURCE: David Huffaker, Georgetown master's thesis

MSNBC

Internet Dangers/Risky Behavior

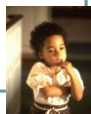
Adolescents are rarely aware or concerned that the personal information that they post can put them at risk to online predators and cyber bullies.



Create or annihilate?

Our children are the builders of tomorrow's world—quiet infants, clumsy toddlers, and running, squealing second graders, whose pliable neurons carry within them all humanity's hope. Their flexible brains have yet to germinate the ideas, the songs, the societies of tomorrow. They can create the next world or they can annihilate it. In either case, they will do so in our names.

—A General Theory Of Love, 225-226



Adolescence development

The kinds of minds that children come to own are profoundly influenced by the kind of experiences they are able to secure in the course of their lives... Mind is the product of opportunity... We can do a great deal about the conditions and opportunities the young have during the course of their development.

—Elliot Eisner

WE CANNOT ALWAYS BUILD THE FUTURE FOR OUR YOUTH, BUT WE CAN BUILD OUR YOUTH FOR THE FUTURE

