



The Melissa Institute  
For Violence Prevention and Treatment

# How Social Media and Computer Technology Can Help Students Succeed in School and Enhance Their Well-Being

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# Fast Track Research Group

- 20-year retrospective with **753 kindergarten** students from multiple sites, mostly Euro- and African-American
- Teachers rated social competence on 8 item scale (e.g., “Cooperates” “Shares” “Helpful” - see handout)
- Among the findings, **at age 25...**

# For every one-point increase on the 8 item scale, the child was...

- Twice as likely to attain a college degree in early adulthood;
- 54% more likely to earn a high school diploma; and
- 46% more likely to have a full-time job at the age of 25



**For every one-point decrease on the  
8 item scale, the child had a...**

- 67% higher chance of having been arrested by early adulthood;
- 82% higher rate of recent marijuana usage; and
- 82% higher chance of being in or on a waiting list for public housing

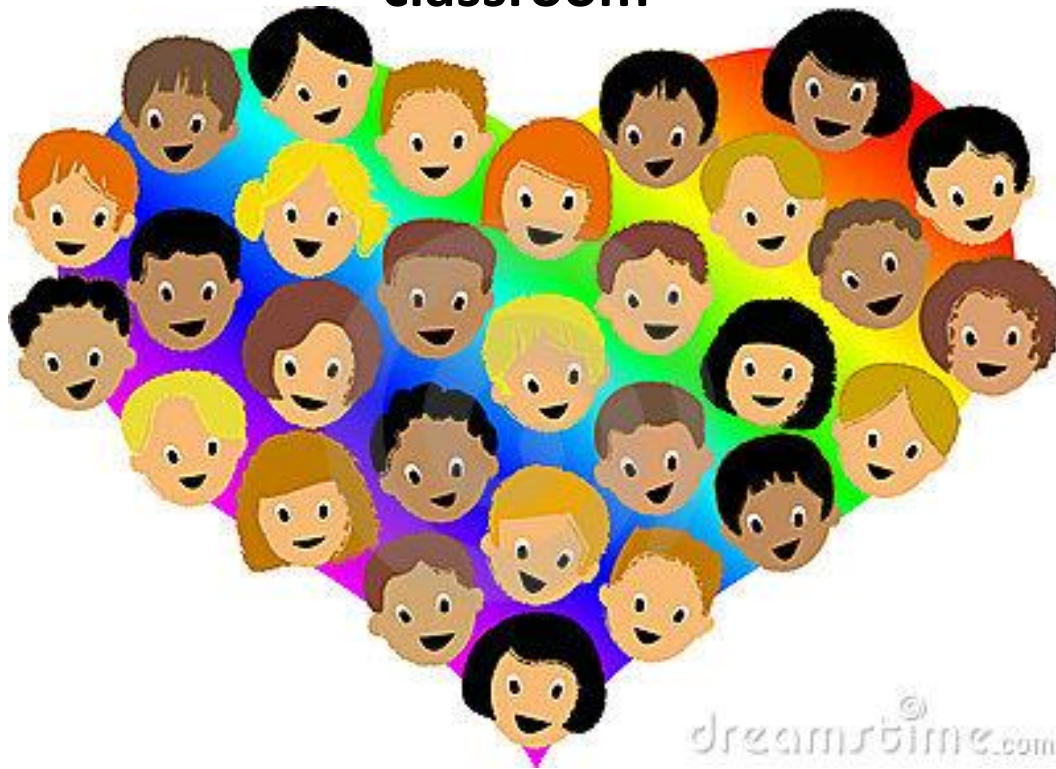


# Dunedin Study

- Followed a cohort of over 900 children in New Zealand for over 35 years
- Researchers showed that **a child's self-control at kindergarten age** was a powerful predictor of a wide range of important outcomes later in life
- Including education, health, financial stability, and criminal conduct
- Stronger predictor than IQ or SES


**PARENTS SEND  
US THE BEST  
KIDS THEY  
HAVE!**

**Imagine a hypothetical  
large city kindergarten  
classroom**




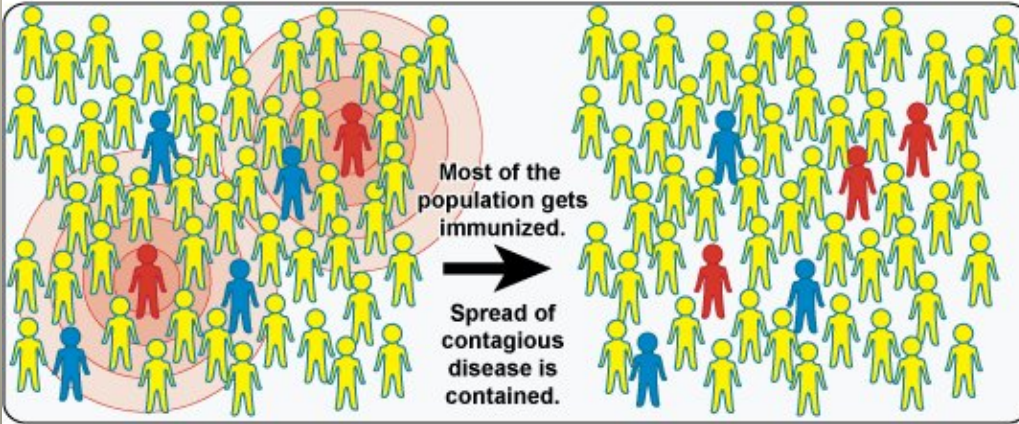
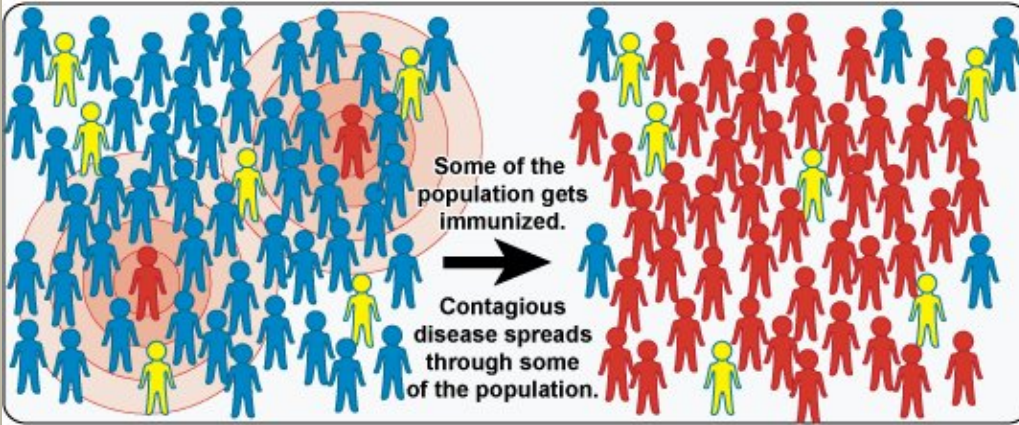
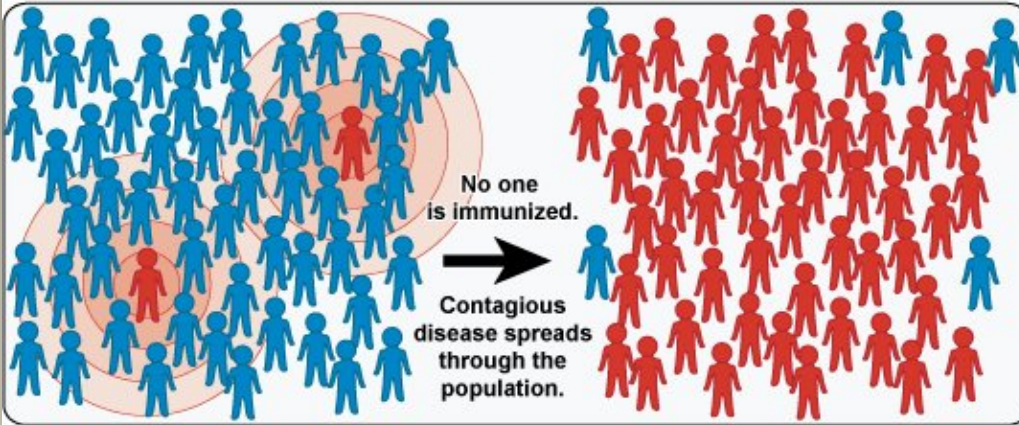
**Conservatively, a 30% dropout rate  
converts to 9 students in a kindergarten  
class of 29**



 = not immunized but still healthy

 = immunized and healthy

 = not immunized, sick, and contagious



## Herd Immunity

The greater the number of individuals who own protective factors against a contagious agent, the lesser the likelihood that others will succumb to it

**Kindergarten year begins with  
(hypothetically) 3 children with  
significant behavioral challenges**



**By the time the year is over, the students  
with the **fewest protective factors** have  
begun to succumb**

# Creating “Behavioral Herd Immunity”

- **Behavioral “contagion” is NOT a purely one-to-one correspondence (as are some diseases)**
  - Social-emotional deficit is **not a disease**
  - Other very significant risk factors in play beyond peer effects
- **BUT, social learning theory suggests:**
  - Children engage in observational learning and use that information to adjust behavior (e.g., Bobo doll)
  - Teacher attention - in an array of forms - is reinforcing to many externalizing children
  - Children with fewer social-emotional skills will tend to seek the reinforcer via the most familiar pathways

# By kindergarten, child should...

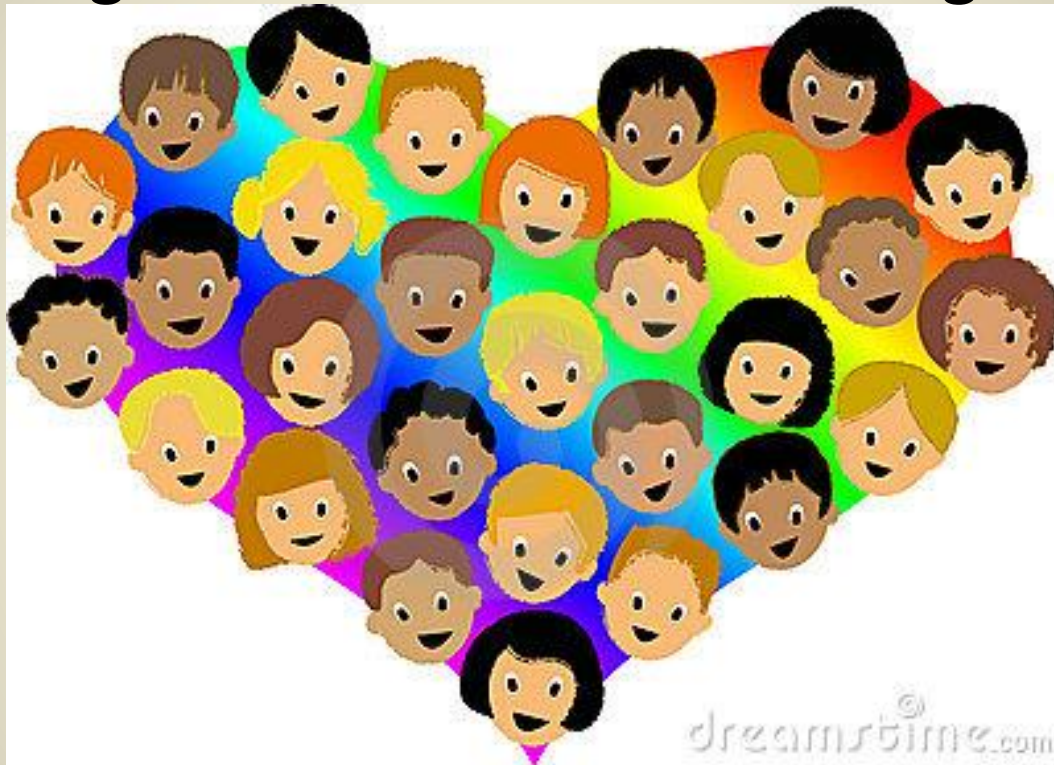
1. Recognize own feeling states
2. Recognize feelings in others
3. Show self-control of aggression
4. Play cooperatively with age-mates
5. Solve problems non-violently



# The Goal

Increase the percentage of  
children with protective  
*social-emotional*  
*competency* who enter  
kindergarten

**Kindergarten year begins with  
(hypothetically) 3 children with  
significant behavioral challenges**



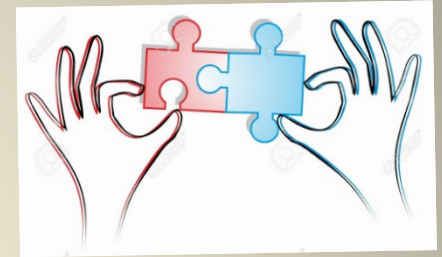
**If more students arrive with the  
necessary protective factors to resist, the  
percentage with acquired risks who move  
on is reduced**

# The Questions

- **Defining the knowledge and skill sets** –
  - Which are the most critical?
- **Reaching the hard to reach** –
  - Can interest, motivation and persistence be generated?
- **Changing parenting behavior** –
  - Is the medium the message?



# Two-Pronged Approach



## Number 1:

- **High Quality Preschool** for all children 3-4 using *National Association for the Education of Young Children (NAEYC)* and *National Institute for Early Education Research (NIEER)* standards
- *High Scope* or *Creative Curriculum*
- Florida's Voluntary Pre-Kindergarten



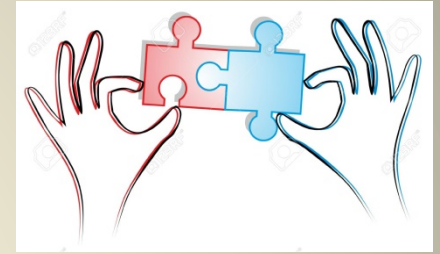
# Two-Pronged Approach

## Number 2:

- **Parenting Skills Development**

- The Parent Academy
- ACT – Raising Safe Kids (Melissa Institute)
- Others – Florida Dept. of Children and Families

• **How can Internet technology and social media be used to reach and train parents?**



# Use of Online Resources for Parent Training

<http://www.ncbi.nlm.nih.gov/pubmed/25351866> - A randomized study of **internet parent training** accessed from community technology centers.

<http://www.ncbi.nlm.nih.gov/pubmed/26462968> - Guided **Internet-Based Parent Training** for Challenging Behavior in Children With Fetal Alcohol Spectrum Disorder (Strongest Families FASD): Study Protocol for a Randomized Controlled Trial

<http://www.sciencedirect.com/science/article/pii/S0005796712000186> - **Internet-based parent management training**: A randomized controlled study

<http://www.ncbi.nlm.nih.gov/pubmed/23607827> - **Web-based delivery of a preventive parent training** intervention: a feasibility study.

<http://www.jmir.org/2012/5/e139/> - Development and Testing of a Multimedia **Internet-Based System for Fidelity and Monitoring** of Multidimensional Treatment Foster Care

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2744504/pdf/nihms131714.pdf/?tool=pmcentrez> - Expanding the Reach of Preventive Interventions: Development of an **Internet-based Training for Parents of Infants**

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4548016/> - Decrease in Behavioral Problems and Trauma Symptoms Among At-Risk Adopted Children Following **Web-Based Trauma-Informed Parent Training Intervention**

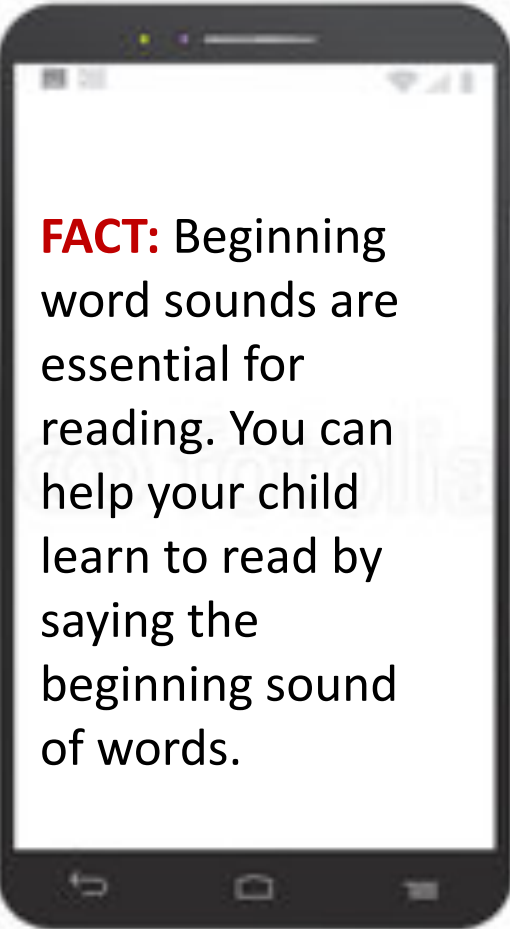
<http://www.ncbi.nlm.nih.gov/pubmed/24844734>- **Web-based parenting skills to reduce behavior problems** following abusive head trauma: a pilot study.

<http://jgcp.ku.edu/1d-web-based-parenting-intervention-mothers> - **Web-based Parenting Intervention** for Mothers of Infants At-Risk for Maltreatment

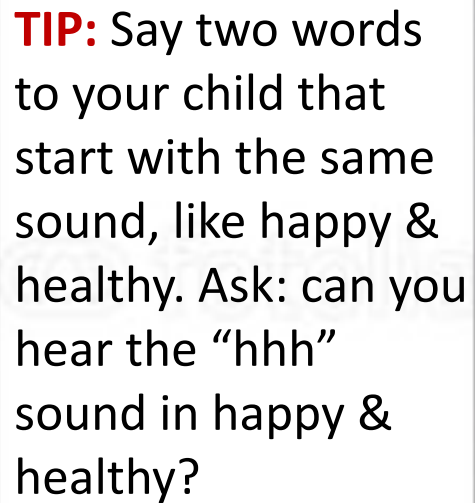
# Stanford Study

- *One Step at a Time: The Effects of an Early Literacy Text Messaging Program for Parents of Preschoolers* (York & Loeb, 2014)
- Low income families -- but 80% had unlimited texting
- Three texts every week: FACT, TIP, GROWTH
- Total cost about one dollar per family
- Being piloted in MDCPS – VPK (?)

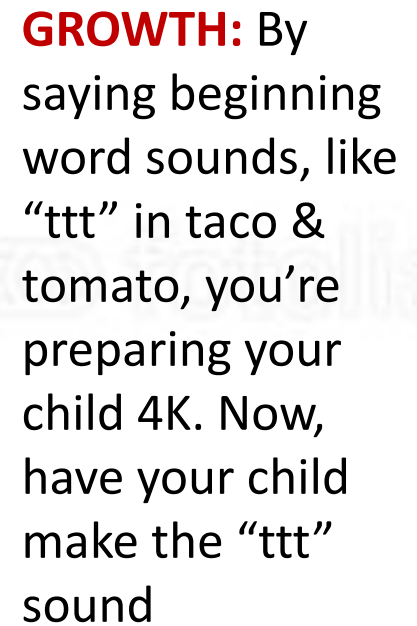


A black smartphone with a white screen. The screen displays text in black font. At the top of the screen, there are icons for signal strength, Wi-Fi, and battery. At the bottom, there are three capacitive touch icons: back, home, and recent apps.

**FACT:** Beginning word sounds are essential for reading. You can help your child learn to read by saying the beginning sound of words.

A black smartphone with a white screen. The screen displays text in black font. At the top of the screen, there are icons for signal strength, Wi-Fi, and battery. At the bottom, there are three capacitive touch icons: back, home, and recent apps.

**TIP:** Say two words to your child that start with the same sound, like happy & healthy. Ask: can you hear the “hhh” sound in happy & healthy?

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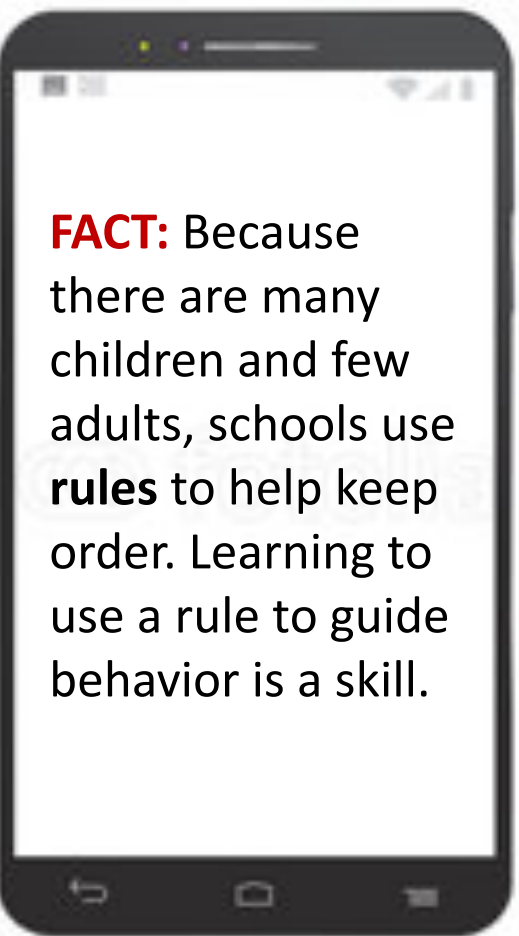
**GROWTH:** By saying beginning word sounds, like “ttt” in taco & tomato, you’re preparing your child 4K. Now, have your child make the “ttt” sound

**Kindergarten students whose parents were exposed to social and emotional training using computer technology and social media will show higher levels of observed social and emotional skills at entrance**

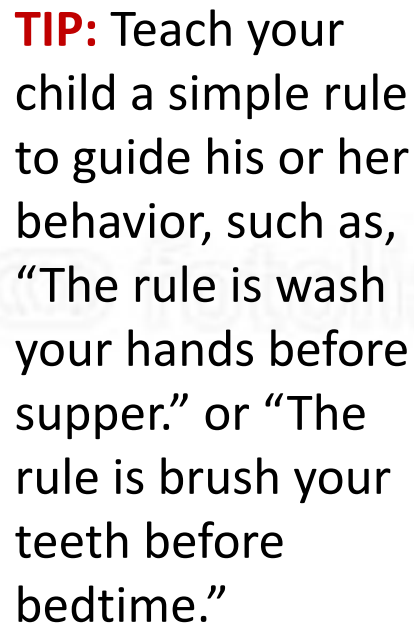
# What If?

- Parents were taught how to **increase their child's social and emotional competency** via social media and other Internet technology?
  - May be a stronger **predictor** of school success and positive later life outcomes than academic skills alone
  - May help provide that **protective factor** that contributes to herd behavioral immunity

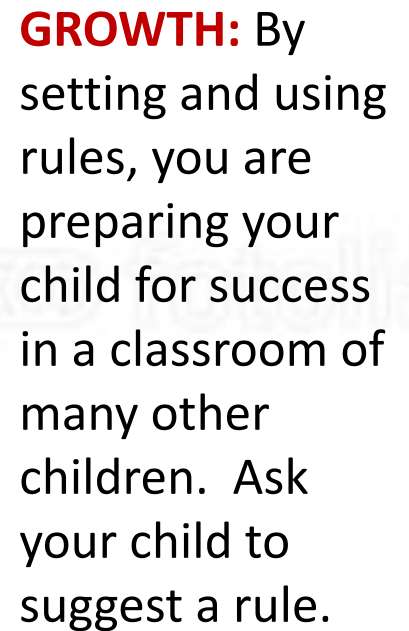
# Text-Based Social and Emotional Skills

A black smartphone icon with a white screen. The screen displays text about the use of rules in schools.

**FACT:** Because there are many children and few adults, schools use **rules** to help keep order. Learning to use a rule to guide behavior is a skill.

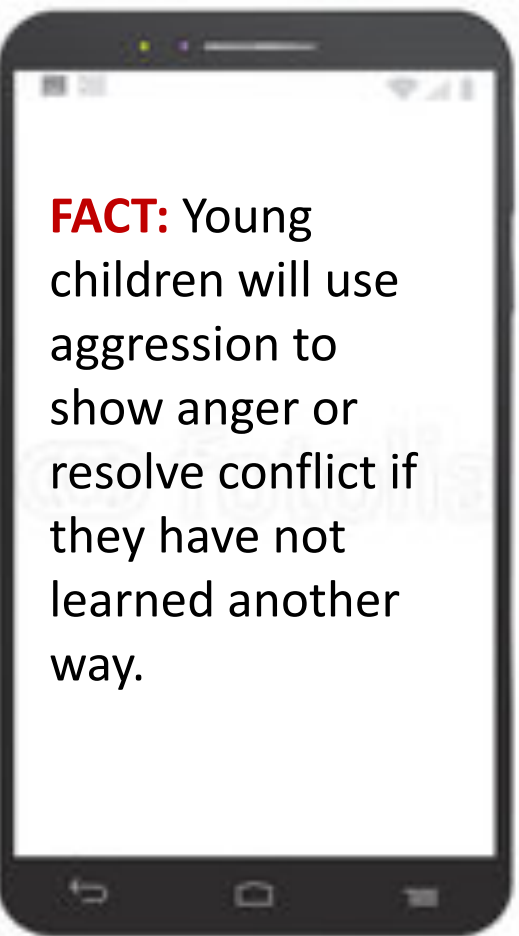
A black smartphone icon with a white screen. The screen displays a tip for teaching children simple rules.

**TIP:** Teach your child a simple rule to guide his or her behavior, such as, “The rule is wash your hands before supper.” or “The rule is brush your teeth before bedtime.”

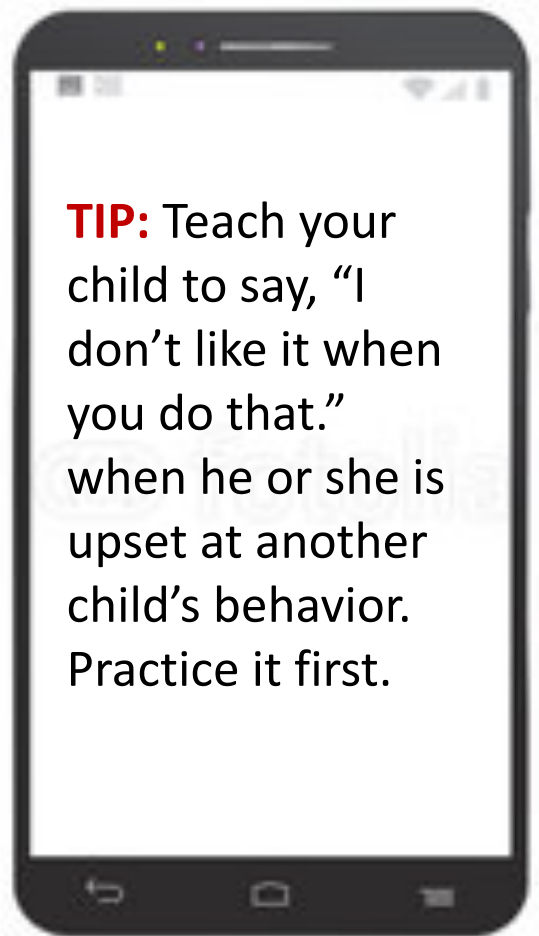
A black smartphone icon with a white screen. The screen displays information about the growth of using rules.

**GROWTH:** By setting and using rules, you are preparing your child for success in a classroom of many other children. Ask your child to suggest a rule.

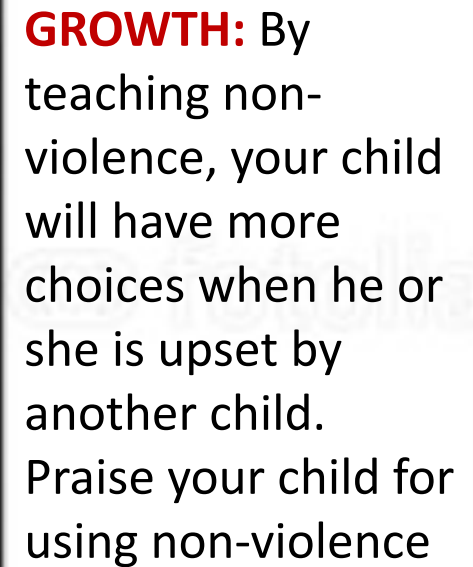
# Text-Based Social and Emotional Skills

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**FACT:** Young children will use aggression to show anger or resolve conflict if they have not learned another way.

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**TIP:** Teach your child to say, “I don’t like it when you do that.” when he or she is upset at another child’s behavior. Practice it first.

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**GROWTH:** By teaching non-violence, your child will have more choices when he or she is upset by another child. Praise your child for using non-violence



# Pew Research Center Data

- **90%** of adults 18-29 use social media
- **50%** of adults with lowest income use SM
- **71%** of all online adults use Facebook
- **23%** of all online adults use Twitter
- **26%** of all online adults use Instagram
- **52%** of online adults now use 2 or more social media sites, up from 42% in 2013



- Start a Facebook page **dedicated solely** to parents raising preschool children...and friend everybody
- Publicize and direct parents to page
- Have a Tip of the Day...Every day
- Allow parents to post their own problem-solving successes
- Post short reviews of relevant toys, books, and media
- Post related video links from YouTube or home made from Vimeo



- Start an SEL Parent Twitter account
- Use multiple media to build following
- use hashtags to training tips and information (e.g., #4kparents)



- Produce 30-second video models of tips for Twitter or Facebook
- [https://www.youtube.com/watch?v=voqBgdtKq\\_U](https://www.youtube.com/watch?v=voqBgdtKq_U)

# Reduction in crime as a result of one year increase in schooling

Moretti, E. (2007) Crimes and the cost of criminal justice. In Belfield and Levin (Eds.), The price we pay. Brookings Institution

- Murder 30%
- Assault 30%
- Vehicle theft 20%
- Arson 13%
- Burglary 6%
- Larceny 6%

# Savings in crimes prevented as a result of 1% increase in male high school graduation

(Moretti, 2007)

• Murder	\$ 1.12	billion
• Rape	\$ 139	million
• Robbery	\$ 8.6	million
• Assault	\$ 368	million
• Burglary	\$ 9.3	million
• Larceny/theft	\$ 7	million
• Car theft	\$ 18	million
• Arson	\$ 18	million

# The Challenge

- Are we leaving a potentially valuable tool to increase school success sitting in the box?
- \$110,000 per year to house a child in corrections **vs.** cost of a single Social Media Training Specialist position
- Melissa Institute's role
- Higher education role
- Parent Academy role
- Your role

