Please Note: this hand-out is intended as a supplement to the presentation, not as a substitute for the presentation. It is intended to assist those who attend my presentation on September 2, 2015, to spare them the distraction of taking excessive notes. These pages are NOT intended to be read separately from the presentation; they cannot “stand by themselves.” If you would like to get a sense of the presentation but did not have the opportunity to attend, please read my second book Boys Adrift especially chapters 2 and 8; and also my third book Girls on the Edge, especially chapters 5 and 7. You can reach me via email at mcrcad@verizon.net but also please send a copy to my personal email address leonardsax@prodigy.net.

A short history of kindergarten: Most of the material about Friedrich Froebel and the history of kindergarten – which in its original usage was intended for children 3 to 6 years of age – comes from Norman Brosterman’s book Inventing Kindergarten (Abrams, 1997).

The acceleration of the early curriculum began with the publication of A Nation at Risk during the Reagan administration, 1983. In chapter 2 of my book Boys Adrift, and separately in chapter 5 of my book Girls on the Edge, I trace how this report had the unintended consequence of accelerating and narrowing the focus of the early years.

Earlier is not better

What can we learn from Finland? They don’t begin formal education until age 7, but they beat us in the PISA. No non-Asian nation has ever beaten Finland on the reading portion of the PISA. For the latest PISA data, http://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf. For the various hypotheses about why Finland does so well, see Kevin Carey’s article, “Finlandia” (scroll down to the references, below). To understand why that is so, I recommend Amanda Ripley’s book The Smartest Kids in the World (Simon & Schuster, 2013). The title is a reference to the fact that American kids are no longer “the smartest kids in the world.”
German *Waldkindergarten* is a good example of experiential learning.

Deborah Stipek, dean of education at Stanford: kids form attitudes early, and those attitudes – once formed, tend to be global, stable, and non-contingent. The acceleration of the early elementary curriculum is one factor driving the explosion in the diagnosis of ADHD. See Todd Elder’s work comparing exact birth dates with the risk of being treated for ADHD. The risk does not decrease as kids get older; on the contrary, it INCREASES.

**Sex differences in brain development** (see *Boys Adrift*, chapter 2)

- Chromosomes, not hormones: you will find discussion of the dizygotic zebra finch, and its brain, in chapter 2 of my first book *Why Gender Matters*. Every cell on the left side of the bird’s body is female; every cell on the right side is male. This bird has an ovary on the left side manufacturing female hormones, and a testicle on the right side manufacturing male hormones. If sex differences in the brain were hormonally mediated, then both sides of the bird’s brain should look the same. But the two sides are very different, suggesting that sex differences in this bird’s brain are chromosomally mediated rather than hormonally mediated. Similar findings in humans.

- NIH study, 1995 to the present (see e.g. Lenroot et al., 2007, figure at left; Raznahan et al. 2010; comment in Sax 2010)

- Girls reach full maturity at age 22; boys not until age 30
- **How long can you sit still, be quiet, and pay attention?** No difference when you compare adults: women over 22, men over 30. Huge difference when you compare 6-year-old girls with 6-year-old boys.
Crafts / Fine motor skills

- A flower or pussy willow is fine
- . . .as long as you offer the CHOICE of making a lightsaber instead
- There are many ways of accomplishing the educational objective. Offer choices.

Bottom line:
- Earlier is not better
- Maintain a balance of experiential / didactic
- . . .which today means MORE EXPERIENTIAL, LESS DIDACTIC
- Offer multiple paths to achieve the learning objective

Navajo: Kinaaldá
Orthodox Judaism: not only Bar Mitzvah, but every religious holiday

Every enduring culture is characterized by strong bonds across generations.
See e.g. David Gilmore, Manhood in the Making, Yale University Press 1991.


Most popular movies of 1966:
1) The Bible
2) Hawaii
3) Who’s Afraid of Virginia Woolf?
4) The Sand Pebbles
5) A Man for All Seasons

Most popular movies of 2014:
1) Guardians of the Galaxy
2) Captain America: The Winter Soldier
3) The LEGO Movie
4) Transformers: Age of Extinction
5) Maleficent

The established consensus in 1965: encourage immigrant children to assimilate as soon as possible. For the scholarship underlying this consensus, see Milton Gordon’s monograph Assimilation in American Life: the role of race, religion, and national origins, New York: Oxford University Press, 1964. Because of this long-held consensus, the more recent finding that immigrant children now do better than American-born children is regarded as evidence of a “paradox.”
The immigrant paradox:
Here are some citations demonstrating that girls and boys whose families have recently immigrated to the United States are less likely to be anxious, or depressed, compared with girls and boys born and raised in the United States:


- David Takeuchi and colleagues, “Immigration and mental health: diverse findings in Asian, Black, and Latino populations,” *American Journal of Public Health*, volume 97, pp. 11 – 12, 2007. This article is an introduction to a special issue of the *American Journal of Public Health* (AJPH) devoted to documenting and understanding the interaction between immigration status and mental health in the United States. Full text online at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1716240/. From that special issue of AJPH, see for example “Immigration-related factors and mental disorders among Asian Americans,” *American Journal of Public Health*, volume 97, pp. 84 – 90, full text at http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2006.088401. This article documents a peculiar gender quirk in the immigrant paradox: while the immigrant-paradox effect was generally stronger for females than for males (i.e. being born outside the U.S. was more protective for females than for males), English-language proficiency was a greater risk factor for males than for females. If you are male, and you were born in Asia, and you move to the United States, then mastering English puts you at greater risk of mental disorder; but that’s not true if you are female. Go figure.

Here is some of the evidence that girls and boys whose families have recently immigrated to the United States are less likely to engage in binge drinking or other forms of alcohol abuse, and/or substance abuse:


• Guillermo Prado and colleagues, “What accounts for differences in substance use among U.S.-born and immigrant Hispanic adolescents? Results from a longitudinal prospective cohort study.” *Journal of Adolescent Health*, volume 45, pp. 118 – 125, 2009. Prado and his colleagues document that foreign-born Hispanic adolescents are significantly less likely to engage in drug abuse, compared with similarly-situated U.S.-born Hispanic adolescents. They conclude that the key difference is that the U.S.-born Hispanic teens are looking to their same-age peers for guidance, while the foreign-born Hispanic teens are looking to their parents and to other adults for guidance.


The parent has to be the parent, not a best friend. A best friend can’t tell you what to eat, or forbid you to watch pornography, or take away your phone at 9 pm; but a parent can, and must.

**Launching house competition at a coed school grades K-8:** begin with sports. Specifically:

• Tug of war

• Free throws

• Obstacle course (actually a series of balance beams)

Give plenty of notice, so that every student can prepare if they so choose.
At a coed school, random assignment of kids to teams is NOT reliably effective. Most girls value friendship above team affiliation. What DOES work? Girls against boys.

In grades K through 3, it’s hard to predict in advance which team will win.
In grades 4 through 8, the girls will consistently beat the boys on all three of these activities (see *Girls on the Edge*, chapter 6, for more documentation on this point). But the boys don’t know that.
And we live in a sexist society, a society which teaches children that boys are stronger and faster than girls (even though that is factually untrue, on average, until after about 15 years of age). So the boys are astonished when they find that the girls have won. NOW you introduce the spelling bee.
Each 4th-grade student has the same list of 200 words, and every student must participate. NOW you will find that your 4th-grade boys are using their free time to study the list of words.
Other tips:

- Post photos of the team captains in a frame at the entrance to the cafeteria.
- Assign one lead teacher for each grade to manage awards and penalties, to ensure that the same offense results in the same penalty across the grade.
- Buttons for officers
- Opportunities for extra credit: reading books and then passing a quiz

Innovations from the Barack Obama Academy, a public school in Dallas Texas:

- Friday morning PowerPoint replaces the board at the main entrance
- Hand symbols for each team
- House bracelet which must be EARNED: no discipline referrals for any team member in that grade over one week

Consider competitions in vocal music for students in grades 6, 7, and 8. This competition is two-fold:

- Unison singing: all students must participate
- Nominated group: the most motivated students create a musical number.

You need an objective judge, preferably from outside the school.
Every student has some talent. You want to give every student the opportunity to be a star within the context of the house competition. So the competitions are academic, athletic, musical, and community service.

My fourth book will be published later this year by Basic Books. The title is *The Collapse of Parenting*. The book documents and explores the abdication of authority by American parents. Why did this happen? Why here in the USA so much more than in other countries? What can individual parents do about it? Please visit my website [www.leonardsax.com](http://www.leonardsax.com) for updates.
Sources, and additional reading:

- Katrin Amunts et al., “Gender-specific left-right asymmetries in human visual cortex,” *Journal of Neuroscience*, volume 27, pp. 1356-1364, 2007, full text available at no charge at this link: [http://www.jneurosci.org/cgi/content/full/27/6/1356](http://www.jneurosci.org/cgi/content/full/27/6/1356)
- Svetlana Lutchmaya, Simon Baron-Cohen, and Peter Raggatt. Foetal testosterone and


- Leonard Sax, “Why not just put ALL the kids on medication?” *Psychology Today*, April 2013, online at www.psychologytoday.com/node/122122
