UPSTREAM INNOVATION:
Nurturing the Skills Today that Will Shape Our Children’s Tomorrow

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The Economics of Early Childhood
Smart Beginnings for Virginia’s Workforce Pipeline
Richmond VA – October 10, 2017
Upstream Innovation

“When you step into an intersection of fields, disciplines, or cultures, you can combine existing concepts into a large number of extraordinary new ideas.”

- Frans Johansson, *The Medici Effect*
WHAT IF...?
The Start-Up of Your Baby

“A revolutionary new guide to thriving in today’s world”

offering strategies to

“help our children survive and thrive and achieve our boldest parenting/child-rearing ambitions.”
From Owner’s Manual to Strategic Plan

• Shared mission/vision
• Actionable goals
• Flexibly persistent

Clarify 3 critical questions:
WHY US

The Role of Caring Responsive Adults

*If your actions create a legacy that inspires others to dream more, learn more, do more and become more, you are an excellent leader*

- Dolly Parton

*Be my teacher from day one…be my sky, my moon, my sun*

- Rosemary Wells, *Hand in Hand*

**CEO = “Chief Engagement Officer”**
WHY US: Business
Early Childhood and The Workforce

• Quality Child Care Impacts Business*
  • 45% of parents miss work 6+ times/month
  • 65% of parents’ work schedules affected
    • ~$29B: Lost by US Working families/year
    • ~$4.4B: Cost to US businesses

• Workforce of Today
  • 0-5 years: 3% of GDP = ~2x US Auto

• Workforce of Tomorrow

*Parents and the High Cost of Child Care
ChildCare Aware 2016 Report
WHY US
WHY NOW
WHY EARLY
WHY NOW
The World Our Children Will Live & Work In

• Industrial to Information Age
• Local & linear to global & exponential
• Digital Age and the “relentless march of technology”
• From silos to systems
• The rise of emotional intelligence
• Need to plan to adapt
  • 10-year plans no longer suffice
  • 65% of students today will work in jobs that don’t currently exist
Innovative Business Strategies
10 New Guiding Principles

1. **People** and **purpose** first
2. **Engage** don’t pamper
3. **Collaboration** as the new competition
4. Valuing **play** at work
5. Embrace **non-linear** thinking
6. **Compasses** over maps
7. **Questions** over answers
8. Strive for big-picture **context**
9. Learn to **read people**
10. Be willing to **get it wrong**
World Economic Forum: 21st C Skills

1. Critical thinking
2. Creativity
3. Communication
4. Collaboration
5. Curiosity
6. Initiative
7. Persistence & grit
8. Adaptability
9. Leadership
10. Social & cultural awareness

Exhibit 1: Students require 16 skills for the 21st century

THE 21ST C TOOLKIT

• “soft,” “non-cognitive” and “other”

• “Alphabet soup” of skills:
  • 5 C’s: creativity, communication, collaboration, critical thinking, curiosity
  • 4 R’s: ‘reading, ‘riting & ‘rithmetic + relationships
  • Social-emotional, empathy, adaptability, ability to fail
WHY US
WHY NOW
WHY EARLY
WHY EARLY
The Challenge of the Early Years

I used to have functioning brain cells, but I traded them in for children.

CAN I CALL YOU BACK IN FIVE YEARS?

(Images of a cartoon and a pile of baby supplies)
WHY EARLY
The Foundational Importance of Starting Early

• Starting early is intuitive
  • Parenting: brushing teeth, potty training, reading, feeding
  • Business: “Top companies engage employees from minute they show up on the job”

• All I Really Needed to Know…
WHY EARLY
The Amazing Baby Brain

• 85% of brain growth in first 3 years
  • Born with ~100 billion brain cells
  • Up to 1 million new neural connections/sec
    • Birth: Vision/hearing
    • By 1 year: Language
    • By age 5: Thinking, reasoning, communicating

• Executive Function Skills – age 3-5
WHY EARLY
What Happens in Early Childhood…

3rd grade reading scores predict future life success…

18 month vocabulary predicts 3rd grade reading scores

5 year old social skills predict future life outcomes
  • More likely to graduate from high school, get college degree in early adulthood, have full-time employment at age 25

The predictive power of marshmallows
  • Mischel’s Marshmallow Test
  • The Marshmallow (& Spaghetti) Challenge
WHY EARLY
The Power of Social Networking

Strengthening connections and assembling the 21st C toolkit involves:

- Socially-gated learning
- Serve & Return
The 7 QI Skills

ME
WE
WHY
WILL
WIGGLE
WOBBLE
WHAT IF
QI Skill 1: ME

Focusing Attention on Self Management

- Self-awareness
- Self-regulation
- Self-control
- Attention
- Focus

He that controls others may be powerful, but he who has mastered himself is mightier still

- Lao Tsu
QI Skill 2: WE

Learning to Play Well With Others

The **people skills** necessary for effective communication, collaboration, relationships and teamwork, including:

- Emotional Intelligence
- Social-emotional skills
- Language
- Empathy
- Perspective taking
- Active listening
QI Skill 3: WHY
Seeing the World As a Question Mark

The curiosity skills necessary to strive for a better understanding of how the world works:

• questioning
• curiosity
• inquisitiveness

The important thing is not to stop questioning. Curiosity has its own reason for existing.
- Albert Einstein
QI Skill 4: WILL
Self-Motivation: Applying the Power of Will

The motivation skills that encompass:

- Dedication & drive
- Commitment & conscientiousness
- Grit & gumption
- Persistence & perseverance
- Get-the-job-done, can-do, go-getter attitudes

You can motivate by fear and you can motivate by reward, but both of these are only temporary. The only lasting thing is self-motivation.

- Homer Rice
QI Skill 5: WIGGLE
Putting Wiggles to Work

Physical and intellectual restlessness embodied by agile “movers and shakers” who take action, set stretch goals and actively reach for the stars

Creative thinkers try new things and move with the changing world

- Elaine Dundon, Seeds of Innovation
QI Skill 6: WOBBLE
Raising Children Who are Fit to Fail

The **adaptability skills** that build and foster:

- Ability to face, overcome, learn from failure
- Resilience
- Adaptability
- Agility

“Many people think you get stability by minimizing all risk. But ironically, in a changing world, that’s one of the riskiest things you can do.”

- Reid Hoffman, *The Start Up Of You*
QI Skill 7: WHAT IF
Imagining a World of Possibilities

• The “possibility” skills that allow us to understand not just how the world is, but envision how it could be. They include:
  • Out-of-the-box, innovative thinking
  • Open-mindedness
  • Curiosity
  • Imagination
  • Creativity
  • Hope
QI Skill 7: WHAT IF
Imagining a World of Possibilities

Children are the R&D department of the human species – the blue-sky guys, the brainstormers

- Alison Gopnik, *The Philosophical Baby*

The creative adult is the child that survived

- Ursula K. Le Guin
Children are the living messages we send to a time we will not see

- Neil Postman
1. Consider your ROI
2. Know who’s working for you
3. Make strategic connections
Five Connections that Will Change Children’s Lives

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*The Toddler Brain*

Laura Austin Jana, MD

*How Learning Starts Before Your Child’s Tomorrow*

TED Talk

Laura Jana, MD

*The Toddler Brain*