The Kennewick Model: Annual Growth, Catch-up Growth

May, 2009

Lynn Fielding School Board Member, Author
Your current structure and resource allocation is perfectly designed to produce your current results.

- Lynn Fielding
“The task of a leader is to get his [or her] people from where they are to where they have never been.”

-Henry Kissinger
About your presenter

• Lynn Fielding
  ✓ 22 years as school board member
  ✓ 27 years as practicing business, real estate and tax attorney, LL.M-Georgetown, CPA Maryland
  ✓ 40 years as a farmer, potato storage builder, mechanic
  ✓ author (3 books plus one being typeset)
  ✓ father of 4- youngest just married
  ✓ 6 year director of NWEA (computer-based testing)
  ✓ co-founder of National Children’s Reading Foundation
Kennewick School District

- Enrollment: 15,000
- Schools:
  - 13 Elementary
  - 4 Middle Schools
  - 3 High Schools
  - 1 Vocational Center
- Free and Reduced:
  - 50% Range of F&R
  - 16% - 94%
- Budget: $143 M

- Ethnic Make-up
  - Anglo 74%
  - Hispanic 22%
  - Asian 2%
  - African-American 2%

- Staff:
  - Teachers: 960
  - Classified: 774
  - Administrators: 60
Individual Student 3rd Grade Scores at Thirteen Kennewick Elementary Schools, Fall 2002

Ascending Student Scores in Each School
page 42
each dot a kid, each line is 7 points = a year
6 years between 12th and 87th percentiles
third grade is 45-55th percentile--no alot of students there

Annual growth-- still caterpillar chart
Same instructional time--same growth

Catchup growth
. 3/12/2005
Where Did Tony Get Behind?
Reading Growth from Birth to Kindergarten

Skills typical of:
- 7-year old
- 6-year old
- 5-year old
- 4-year old
- 3-year old
- 2-year old

5 year range

Age in years

Grade in School
“It is common to find within a kindergarten classroom a five-year range of children’s literacy-related skills…. (some) may have skills characteristic of the typical three-year-old, while others might be functioning on the level of the typical eight-year-old.”

-- Dr. Jeni Riley, University of London
as quoted in a joint position statement of the National Association for the Education of Young Children and the International Reading Association
What will happen to Tony if he doesn’t catch-up?
Consequences are clear

- Limit probability they will graduate
- Decreased chance of going to 4 year university
- Significantly reduced average income
- Increased health risks
- Increased divorce rates
- We know how to solve this as well.—doing it or some variation of it.
Understanding the Bands
<table>
<thead>
<tr>
<th>Band Names</th>
<th>Relationship to Grade Level</th>
<th>% of Students Represented</th>
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</thead>
<tbody>
<tr>
<td>Dark Blue</td>
<td>Two-Years Above Grade Level</td>
<td>Top 20%</td>
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<tr>
<td>Light Blue</td>
<td>One-Year Above Grade Level</td>
<td>Next 20%</td>
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<tr>
<td>Green</td>
<td>Grade Level Skills</td>
<td>Middle 20%</td>
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<tr>
<td>Yellow</td>
<td>One-Year Below Grade Level</td>
<td>Next 20%</td>
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<td>Orange</td>
<td>Two-Years Below Grade Level</td>
<td>Next Lowest 10%</td>
</tr>
<tr>
<td>Red</td>
<td>Three-Years Below Grade Level</td>
<td>Bottom 10%</td>
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</table>
National odds at birth of enrolling in a four-year university directly out of high school

Total number of freshman seats available at four year universities

1,277,700

Number of students at each grade level

3,752,200

Odds at birth of your child enrolling as a freshman in a four-year university

One-in-three
Percent of Students within each Band

- 98% of the top half of the dark blue band
- 63% of the bottom half of the dark blue band
- 44% of the light blue band
- 25% of the yellow band
- 12% of the orange band
- 0%
State odds at birth of enrolling in a four year university directly out of high school

- 1:5 in Nevada, California, Arizona, Alaska, Wyoming and Mississippi
- 1:4 in Texas, Washington, New Jersey, Florida, Hawaii and New Mexico
- 1:3 in Maryland, Illinois, Oregon, Oklahoma, Arkansas Missouri, Michigan and Connecticut
- 2:5 in South Carolina, Idaho, Alabama, North Carolina, Ohio, Tennessee, Colorado, Kansas, Virginia, Georgia, Maine, and Kentucky
- 1:2 in New York, Louisiana, Nebraska, Iowa, Wisconsin, Utah, New Hampshire, Delaware, Pennsylvania, Montana, South Dakota, Indiana, Massachusetts, and West Virginia
Know:

- Your current community structure, resource allocation, and belief set is perfectly designed to produce your current incoming kindergarten results.

- Maintain your current program and you can accurately predict next year’s incoming kindergarten readiness levels.

- When you can accurately predict the outcomes, you take responsibility for changing them if you are good, and you give up if you are not.
You will face this curve forever.....until

The 6 year span in fall 2003 incoming kindergarten reading scores
Do: The single most cost effective thing is to change this one perception of parents:

How would entering kindergarten knowing very few basic skills affect a child’s success in school?

64% of parents believe:
“Child will catch up to other children within a year or two”.

27% of parents believe:
“Child will be behind other children throughout school years”.

9% of parents:
“Not sure”.

2008 Thrive by Five Washington Survey
Children’s Reading Foundation

- Local affiliates
  - 14 local affiliates serving 758,000 students in 127 districts
- Simple repetitive message:
  The most important 20 minutes of your day
  Read to a child.
- $1 a student-locally funded, locally operated
- Nancy Kerr (509) 735-9405
• Targets, training and tools for parents
• Three 90 minute lessons per year per age level
• Kennewick alone: 22,000 parent/lessons served
• 78% of students whose parents attended entered with at or above grade level skills.
• $135 per parent per year plus local delivery costs.
• Created more “buzz” than a state championship.

Nancy Kerr, President NCRF
Virginia Smith, READY! National Director
readyforkindergarten.org
509-396-7700
Incoming targets:

- 12-13 alphabet letters and their sounds,
- speaking fluently and in whole sentences,
- vocabulary of 5,000 word
Do:

- Assure that 80% of students enter kindergarten with grade level skills. When students entered kindergarten with grade level language and literacy skills, schools would only need to create annual growth.
Do:

- Elementary principals groups should invited the District leadership (Board, Superintendent, Elementary school director) to spearhead the community engagement.
• If you don’t want to spend the rest of your career creating catch-up growth in the lowest 40% of incoming students,

• You and your community must learn how to minimize the number of students that enter kindergarten in your schools 1, 2, and 3 years behind.
50% of Kennewick’s elementary schools in the top 5% in state, 75% of Kennewick’s elementary schools in the top 25%
Reading Impact on Math Pass Rate for Washington State Elementary Schools (preliminary)

Lewis-Maidment Power Curve Relationship

J Lewis and Associations
509.375.6211
With Current Technology

- We have the assessments, state of art curriculum, staff training, data systems, mechanisms to involve community and parents, and resources to teach 90% of students to read.
- The major issue is doing it.
- The major issue is getting adults to change what they have been doing to do what works.
1995: High School

Freshmen:
• 41% with D or F’s in English
• 42% with D’s and F’s in Math
• 43% with D’s and F’s in Science
• (Glass ceiling effect of English grade)
• Most of the discipline incidents were from a tiny percentage of students most of whom were below grade level readers
• These are the kids who did not learn to read on grade level by the end of 2nd grade.
Clear Goals and Priorities

- After Safety, reading proficiency has the highest priority.
- Do: 90% of students read at grade level by 2nd or third grade.
**Why Reading and Math?**

- We deliver 85% of our curriculum with reading.

- Students who are behind in high school generally did not learn to read well at grade level by 2\textsuperscript{nd} and 3\textsuperscript{rd} grade.

- No other academic success will compensate for failure to lead to read well.
Percentage of Kennewick Third Graders Reading At or Above Standard, Spring 1995-2008
States Have Varying Definitions of Proficiency
(for 8th grade math, most recent scores as of Spring 2003)

Figure 15.1. Varying Definitions of Proficiency for Eighth Grade Math, Spring 2003.
• School by school approach
• Planned incremental, and continuous growth from baseline to the goal
• Primary accountability with principals
• Increased time and money
• Changes at K-3, not at grades 4-5
• Results oriented—it needs to work
• Expectation includes the poor
Percentage of Kennewick Third Graders Reading At or Above Standard, Spring 1995-2008
In organizations goals erode because of a low tolerance for emotional tension. Nobody wants to be the messenger of bad news. The easiest path is to pretend there is no bad news, or better yet, “declare victory”- to redefine the bad news as not so bad by lowering the standard against which it judged”

--Peter Senge
How many believe--

that if you just work harder at what you are already doing:

90% of your students read and do math at or above grade level by the end of third or fourth grade?
Why aren’t 90% of your students reading at State standard?

- You know what to do, you just need to work harder at it?
- You know what to do, you don’t want to do it?
- You know what to do, you can’t get teachers to do it?
- You don’t know what else to do?
- It all depends on the students and other forces beyond your control?
1999 Insight

- When we actually said out loud:
  “We do not know how to do this.”

- Very liberating—As long as you know what to do, the issue is just working harder at what you have always done.

- Telling the truth is always very difficult in this process.
Everywhere in the US – 
low performing schools with low SES blame the students.

Everywhere in the US – 
high performing schools with low SES know it is about the adults.
Percentage of Kennewick Third Graders Reading At or Above Standard, Spring 1995-2008
The Implementation Years

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Principals

- Do become reading experts
- Do attend all the staff reading training
- Do know where all the kids were (data)
- Do know the research
- Be in classrooms, not in the office
- Look-fors (do inspect your expectations)
Endure: Dealing with the Emotional Pain of Leadership

- Tough Conversations
- In entrenched low performing schools, teachers will resist you.
- Principals whom you replace and their friends will resent you for high achievement.
- You must learn to be the sole holder of impossible beliefs to achieve impossible things until performance provides proof.
“There is no use trying,” said Alice; “one can’t believe impossible things.”

“I dare say you haven’t had much practice,” said the Queen. “When I was your age, I always did it for half an hour a day. Why, sometimes I’ve believed as many as six impossible things before breakfast”.

–Lewis Carroll
Teachers

- Reading becomes their priority
- Trained
- Teach the curriculum
- Knew where all the kids were
  - Cooks knew where the kids were
- Unheard of levels of teaming
Curriculum

- Allowed principals to choose whatever they wanted
- Rationale
- Explicit, systematic phonics
- Move to Open Court by Washington Elementary
- “Assisted Move” by four lowest elementary schools
- Comments on Whole Language
Instruction

- Powerful, effective basic instruction
- Delivered eye-ball to eye ball
- Perhaps twice as effective at Washington than ten years before
- Instruction is our craft
- District instructional conferences
- Impact on “talk” - “media stars”
Length of Instruction

- Focus at kindergarten
- From 45-50 minutes to 90 minutes to 120 minute morning reading block
- Ability grouping - 60 minutes
- 15 to 60 minutes longer for those who need it.
Length of Instruction (cont)

- Locke-Bergeson story
- Mansfield story
- Girls championship basketball story.
- Labor day versus November 1
More Time – Nimble Use of the Time

- Students who are behind do not learn faster than students who are ahead. They need more time.
- You can mathematically determine how much more time.
- Not just time.
  - Tailoring the time to their deficiency is essential
  - Multiplying effect of improved instruction
A Real Life Problem

- Tony has just scored at the 11th percentile on the spring 2nd grade reading test. His state set their reading standard at the 50th percentile.

- How much direct reading instruction does Tony need during 3rd and 4th grade to assure he will reach the state standard by the end of 4th grade?
### The Real Life Problem

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<table>
<thead>
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<tbody>
<tr>
<td>a. State Standard in percentiles is</td>
<td>...</td>
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<tr>
<td>b. Tony’s 2nd grade status in percentiles</td>
<td>percentile</td>
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<tr>
<td>c. Difference is</td>
<td>...</td>
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Rough rule of thumb is 13 percentile points = 1 year of growth
In elementary school the normal reading period has been 60-70 minutes

<table>
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<th>d. Divide the gap in points by 13 points to convert the gap into instructional years</th>
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<tr>
<td>Annual Growth minutes</td>
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<tr>
<td>Catch-up Growth</td>
<td>70  70</td>
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<td>1 extra year</td>
<td>70  70</td>
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<td>1/2 extra year</td>
<td>35  35</td>
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<tr>
<td>Total Minutes</td>
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</table>
Students who are behind do not learn faster than those who are ahead.

Catch-up growth is driven primarily by proportional increases in direct instruction time.

Catch-up growth is so difficult to achieve that it can be the product only of quality of instruction in great quantity.
Teaming

- Movement of kids within remediation
- Sharing para-pros.
Assessment and use of data

- Could not see what was happening in kindergarten, first and second grade.
- Could not see what was happening in kindergarten, first and second grade.
- Adding of district tests at K, 1 and 2
- Adding of diagnostic tests by the buildings
- Have to model its use.
“You can either fight assessment or embrace it.

However, you cannot be a high-performance school without embracing assessment.”

-Dave Montague
“There is no point in testing if you don’t look at the data, don’t understand it, and don’t change.”

-Chuck Watson, Principal-Vista Elem., Kennewick, WA
“In God we trust. Everyone else shows their data.”

-unknown
Annual Growth

- Once in public schools, most students make “annual growth”.
- Yet a year of growth each year merely perpetuates the gap between the four quartiles.
- Catch-up growth is required to close it.
Catch-up Growth

- When students leave kindergarten three years behind in reading, they must make six years of growth in three years to catch-up by 3rd grade.

- This means they must make one year of annual growth and one year of catch-up growth each year.

- Or, said another way, two years of growth in each 1st, 2nd, and 3rd grades to catch up.
Belief Sets

- Believe follows achievement.
- Must learn to hold impossible beliefs to achieve impossible things.
“We like to think we follow our beliefs. In reality, our beliefs follow our experience.”

-Paul Rosier
Overarching concept today:

- These are pretty ordinary people.
- Not overly intelligent
  - Not overly good looking
- Kennewick is a pretty ordinary district.
  - Pretty average demographics
  - Pretty average funding
- If they can achieve these kinds of results, we can too.
If we know we have to improve, yet continue to do what we’ve always done in the same way we’ve always done it and continue to get the same results...

Who really are the slow learners?