
The following presentation by Joe Witt, Ph.D., Learning Sciences, iSTEEP Learning Professor Emeritus, LSU, was given at the Response to Intervention Symposium in Austin, Texas in April 2006. This PowerPoint is provided as a resource material by the Center on Instruction.

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2006

# Core Concepts of RTI

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# Kalisha

**Current Grade Placement=5th**

**Current Reading Level=3rd**

# How Do We Help Her

- Many of us
  - Think diagnostically
  - What is her diagnosis
    - Does she have average intelligence
      - If no, then maybe she has a mental disability
    - Does she have a learning disability
- Clear Your Mind for a Moment
  - Think about what she needs
  - Doesn't She Just Need Instruction
    - We can worry later about where instruction occurs

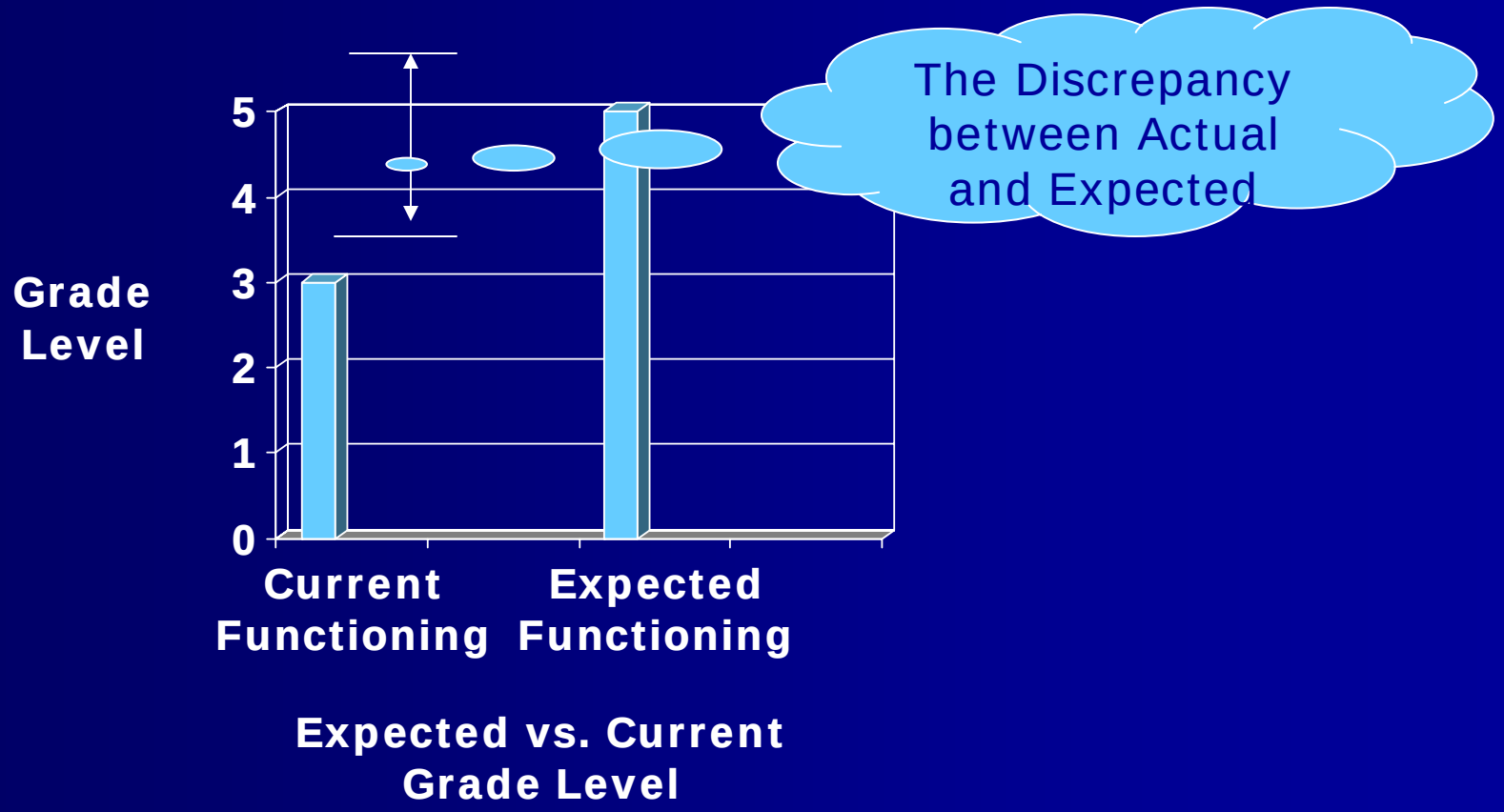
# Kalisha is behind

- With RTI we move first to the question of *What can be done for her?*
- How can we help her improve
- RTI is about
  - Helping first
  - Diagnosing and placing later
- It is a simple idea
  - We will make it a bit more complicated!

# Who Would Benefit from RTI

- Kalisha
  - Outcomes for special education are poor
- Reduced referrals
  - SPED placements up in US 200%
- Her teacher gets help right away
- The SPED teacher can focus on those who really do need the help
- School psychologists and others

# Kalisha: A Discrepancy Does Exist but Why?



# Two Approaches

- Assume problem resides within child and search for problem
  - Learning Disability
- Assume First that student problem is with **instruction**—
  - Document core instruction is effective for most students
  - Rule out lack instruction for referred student

# Current System

- Kalisha is Referred
- Tested
  - Woodcocked
  - WISC—ered
- ***Voila***
  - **Severe Discrepancy**
  - **Diagnosis:  LD**
  - **Placement in Special Education**

# Discrepancy Explained: Kalisha has LD!

- Kalisha goes off to Special Education
- The Classroom Teacher Returns to Normal Routines
- School Based Team is Happy
  - ***Something*** has been done about Kalisha

# The Problem is Placements are UP

- Is there a new LD epidemic
- If not, what could explain the large increases in LD placement?
- Researchers and policy makers discovered other possibilities

# BIG Mystery: How Could Student be Behind in Reading and Not be LD?

Presidents Commission on Excellence in Special Education

Maybe just possibly the child is low because she **did not have the right kind of instruction**.

Poor instruction can also “cause” low achievement.

# Not All “low” students are LD


**Just Because a Student HAS not Learned**

**does not mean Student CAN NOT learn**

# Common Sense Sleeps

- We know this:  students can be low academically because they are ABT or not motivated to learn.
- This is common sense
- Common sense went to sleep in 1970's
  - We don't think.
  - We Woodcock em and Place em.

# Logic Awakened by NCLB and IDEA

- How can we point the finger at instruction
  - Was teacher “highly qualified”
  - Did reading instruction include “essential components of reading”
  - Did we match the right instruction with the students particular need at the right time.

**Duh~**

# Inquiring Minds Want to know

- When problems exist with core and/or supplemental curriculum
  - **How can we say problem is IN child**
- **Plain and Simple:**
  - **If you don't teach them and they don't learn, it is wrong to say the <u>student</u> has the problem.**

# Core principle #1:  3 Tier Model

Core principle #2: Intensity of Services Increase as Student is More Resistant to Intervention

## Core Principle #3: Universal Screening

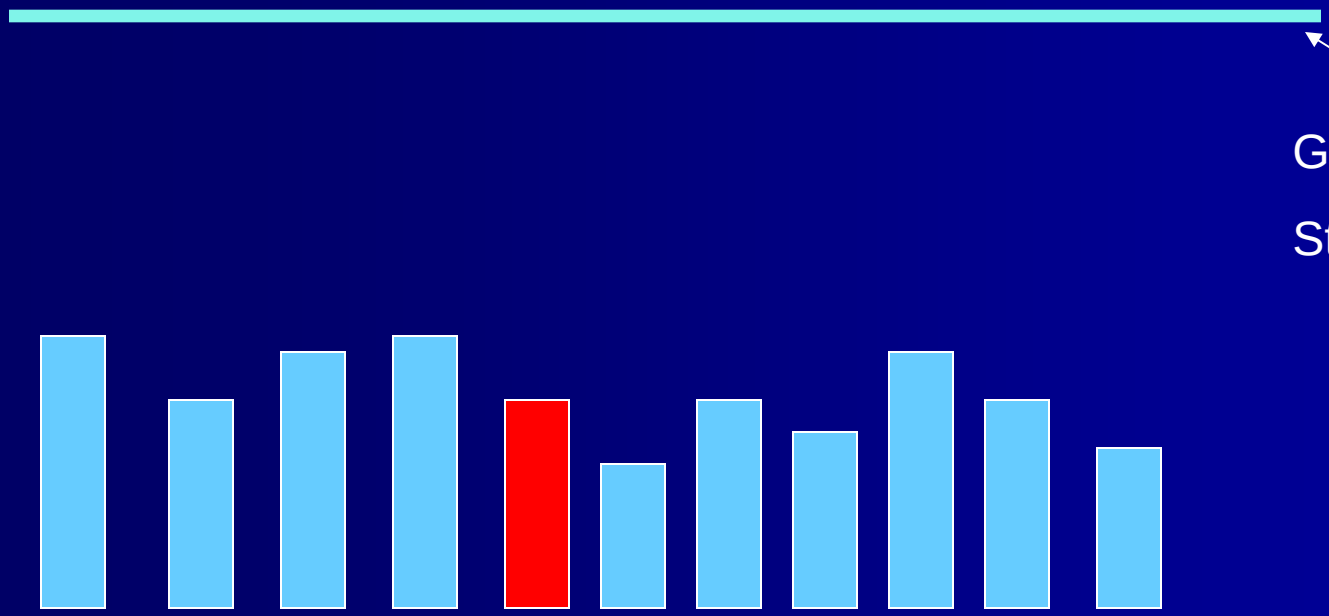
- BRIEF, QUICK.
- Usually CBM or other RELEVANT test
- Valid and Reliable
- Analogous to hearing/vision screens

# Universal Screening—Sounds Like Too Much Work

- STEEP
  - Reading—One Minute Individual Screening
  - Math—Group Screening—2 mins for whole class
  - Writing—Group Screening-- 3 Mins for Class
  - Can't Do or Won't Do.  1 Min.
- Most Schools Screened in half day
- Results returned to teachers that day

**Screening Gives a Lot with Minimal Effort**

# How Do you KNOW if Core Instruction is Working: Screen-Many students not Learning at Tier 1



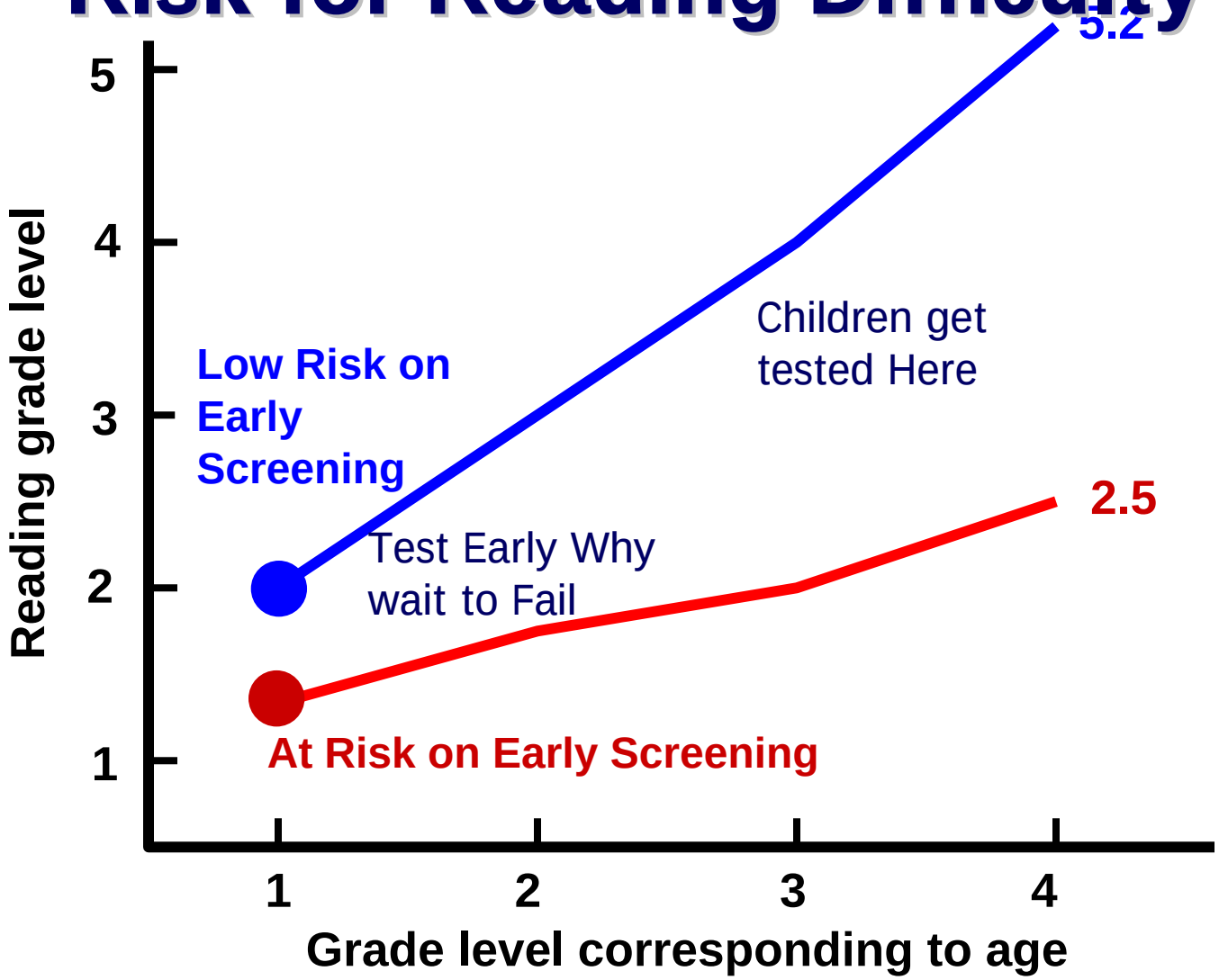

Kalisha in Red Seems to be a Problem

Now does she look like a problem?

# How Does Screening Help

- Catch them early
- Inquiring Minds Want to Know
  - How did Kalisha get behind
  - Did this happen overnight
- NRC Recommendation for Disproportionality

# Screening Identifies Children At Risk for Reading Difficulty



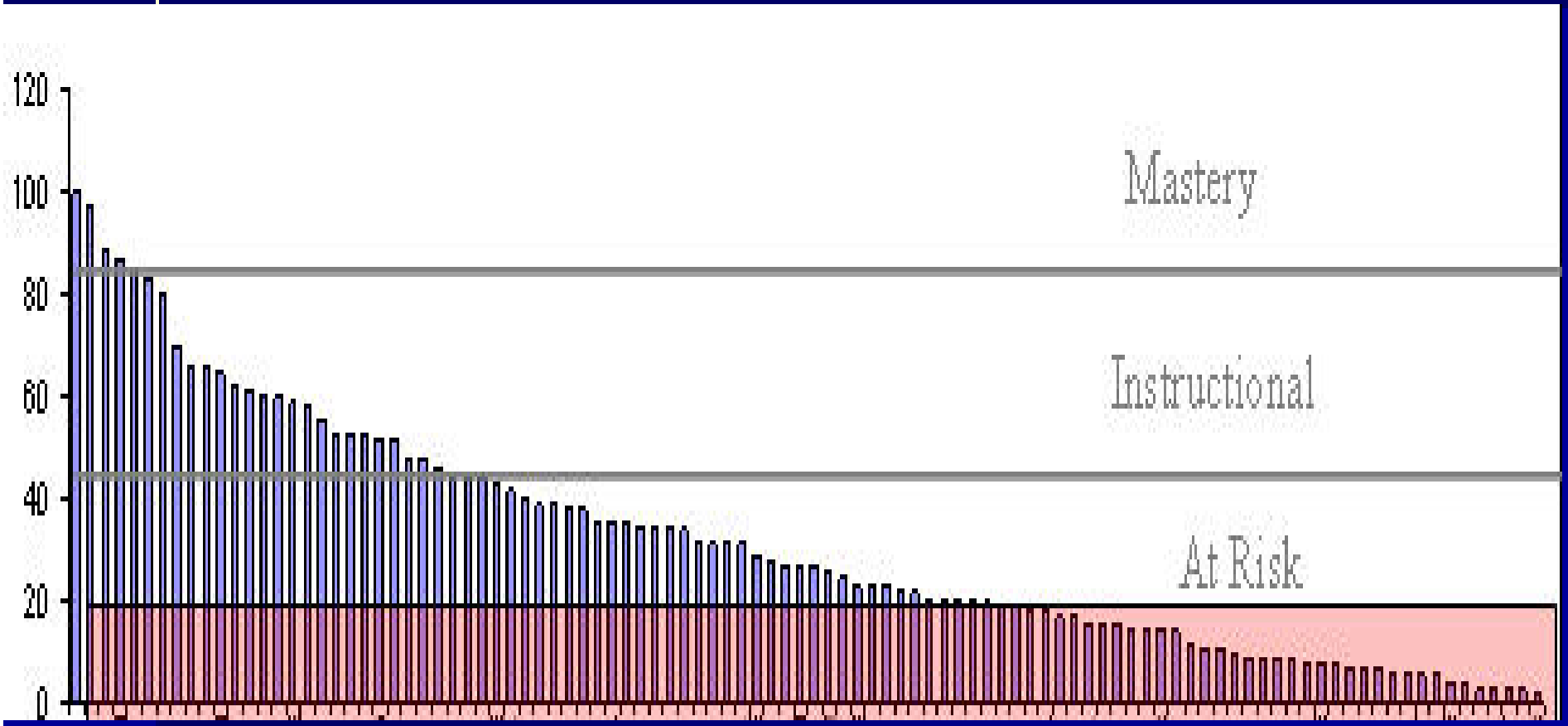
# Another Use of Screening: Snapshot Core Instruction

- If instruction is not effective for many or most students
- That issue must be resolved prior to individual problem-solving or especially placement of some students

# Let me See Reading

Will this be known in future?

# STEEP Screening Identified School Wide Math Deficits in Vail





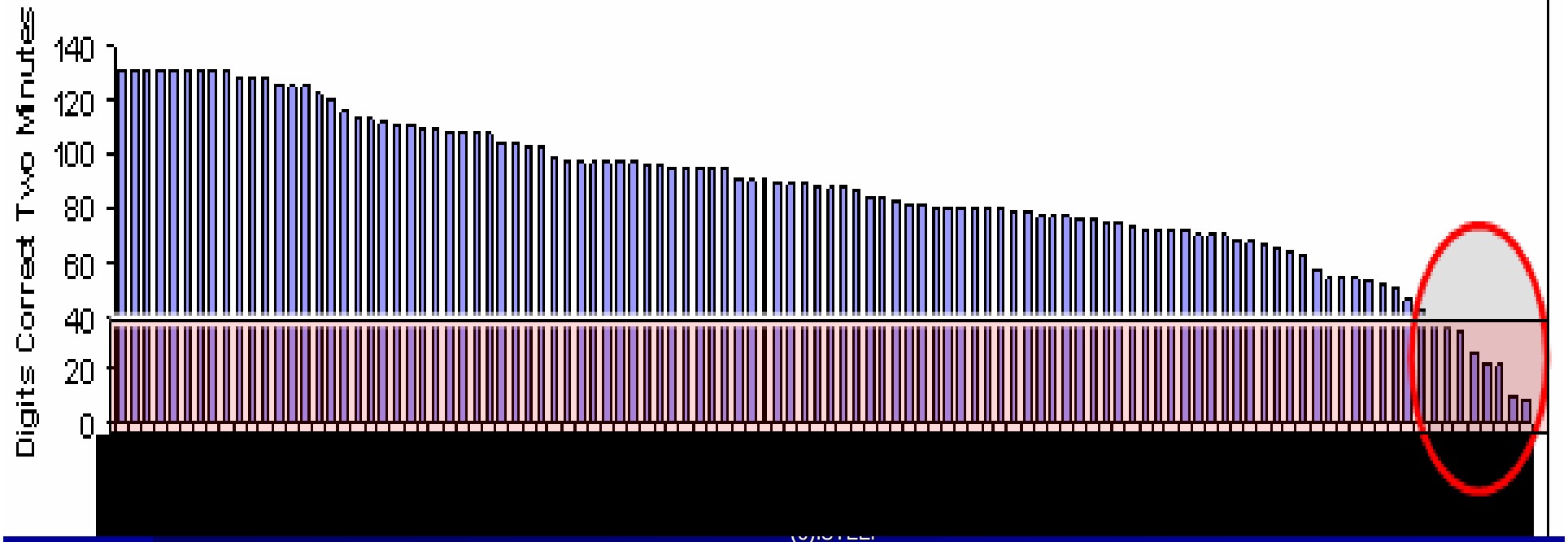

Math problems grades 3-5

# If Screening Detects a Problem with Core Curriculum

- Classwide Intervention
- Large Group
- Most students will respond
- Typically this is a general education responsibility

# After *School Wide* Intervention--No Systemic Problem

Fourth Grade



# Importantly: SAT-9 Data Math

SAT-9 Standard Scores and t-test Results for Pre- and Post-Implementation Years by Grade

| | 2001-2002 | | | 2002-2003 | | | *t* |
|---|---|---|---|---|---|---|---|
| Grade | n | M | SD | n | M | SD | |
| Third | 85 | 562.06 | 143.80 | 129 | 602.54 | 35.20 | 3.07** |
| Fourth | 116 | 611.09 | 120.61 | 117 | 638.22 | 33.39 | 2.35* |
| Fifth | 113 | 636.73 | 109.86 | 107 | 659.17 | 35.77 | 2.01* |
| Total | 314 | 607.04 | 126.83 | 353 | 631.53 | 41.93 | 3.42** |

* $p < .05$

** $p < .01$

Cohen's *d* (effect size between years)

Third .45

Fourth .35

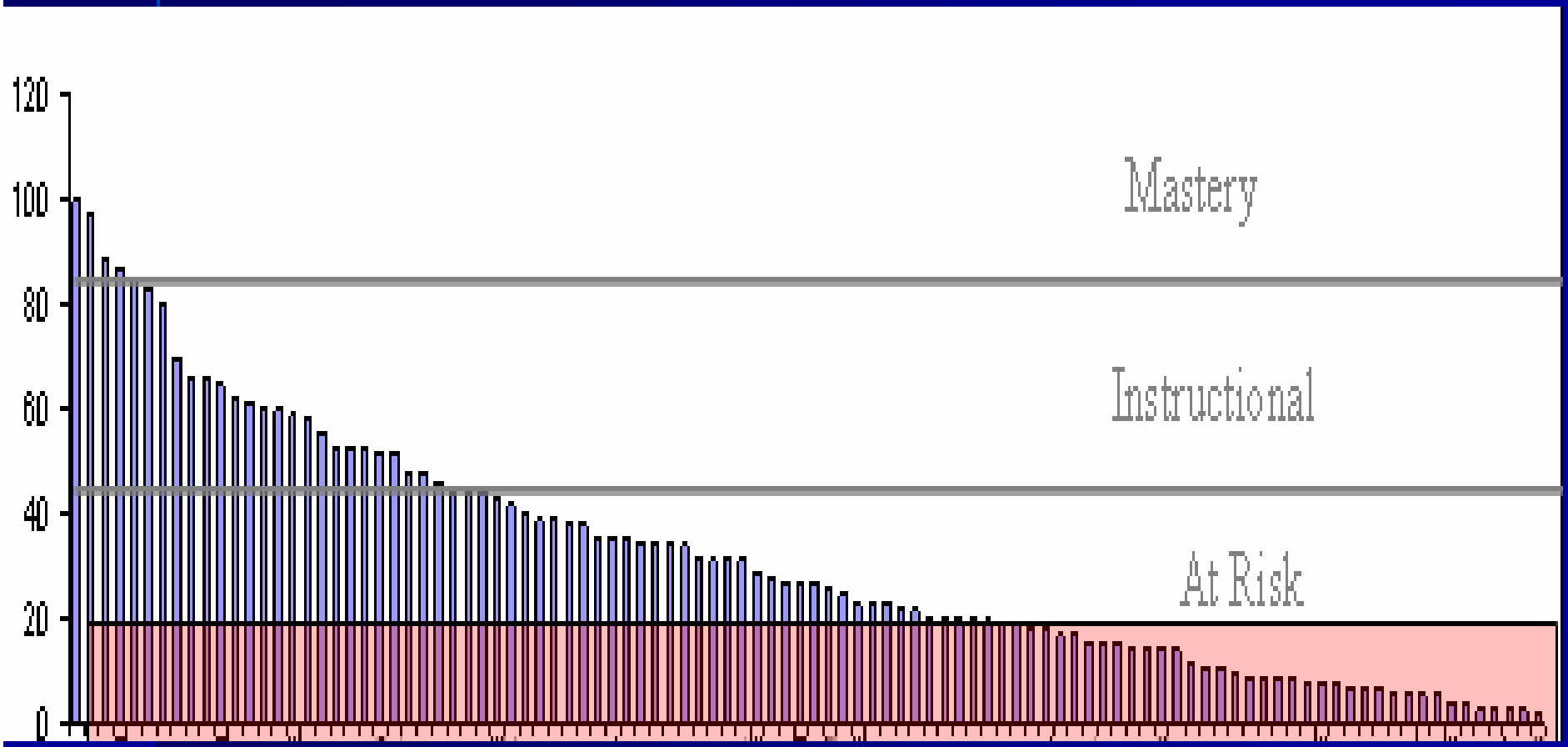
Fifth .31

Total .29

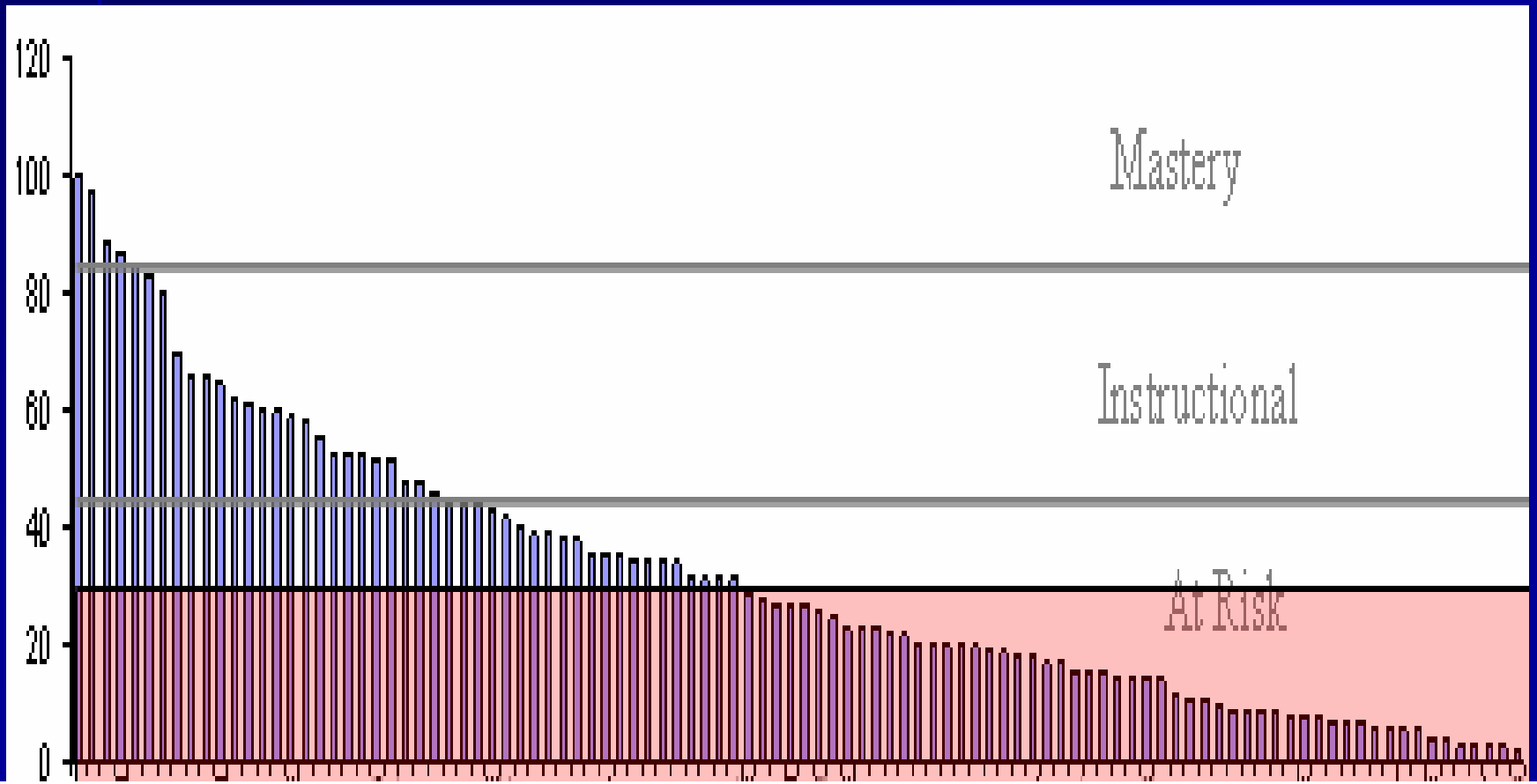
# State Decisions Impact Funding and Resources

- Screening Sorts Students
  - Those that are OK
  - Those in Need
    - Those in Need get Assistance
      - Assistance requires resources
- For States Cut Point for Need
  - Based upon benchmarks
  - Resource allocation also a consideration

# 111 Students If Cut Score is <20 Then 16% Are At Risk

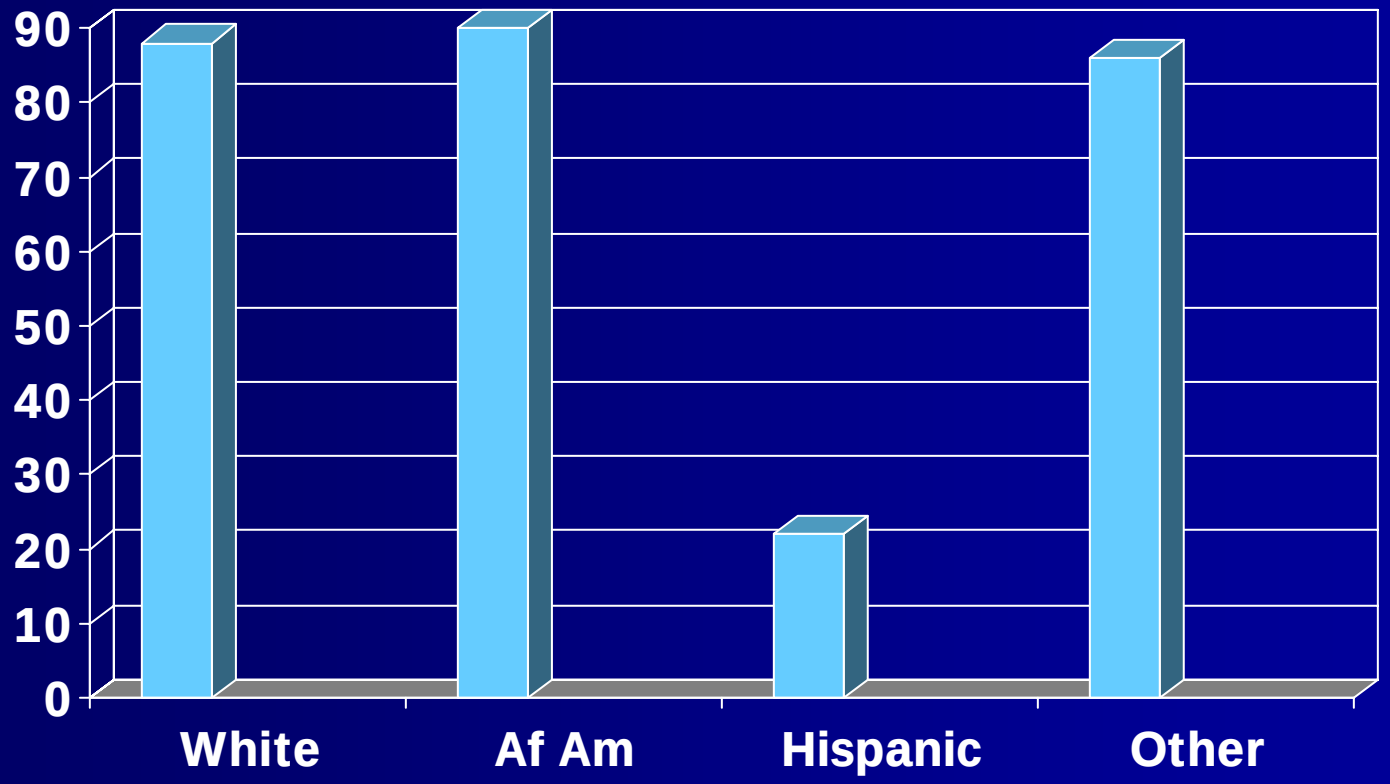


# 111 Students If Cut Score is 26 Then 50% Are At Risk



# RTI Generates Data
# Computer Data Management Helps with Decision Making

# Is Core OK for all Subgroups?




Compare Apples with Apples

# A Cause of Disproportionality is

Low Achievement--Which leads to Referral

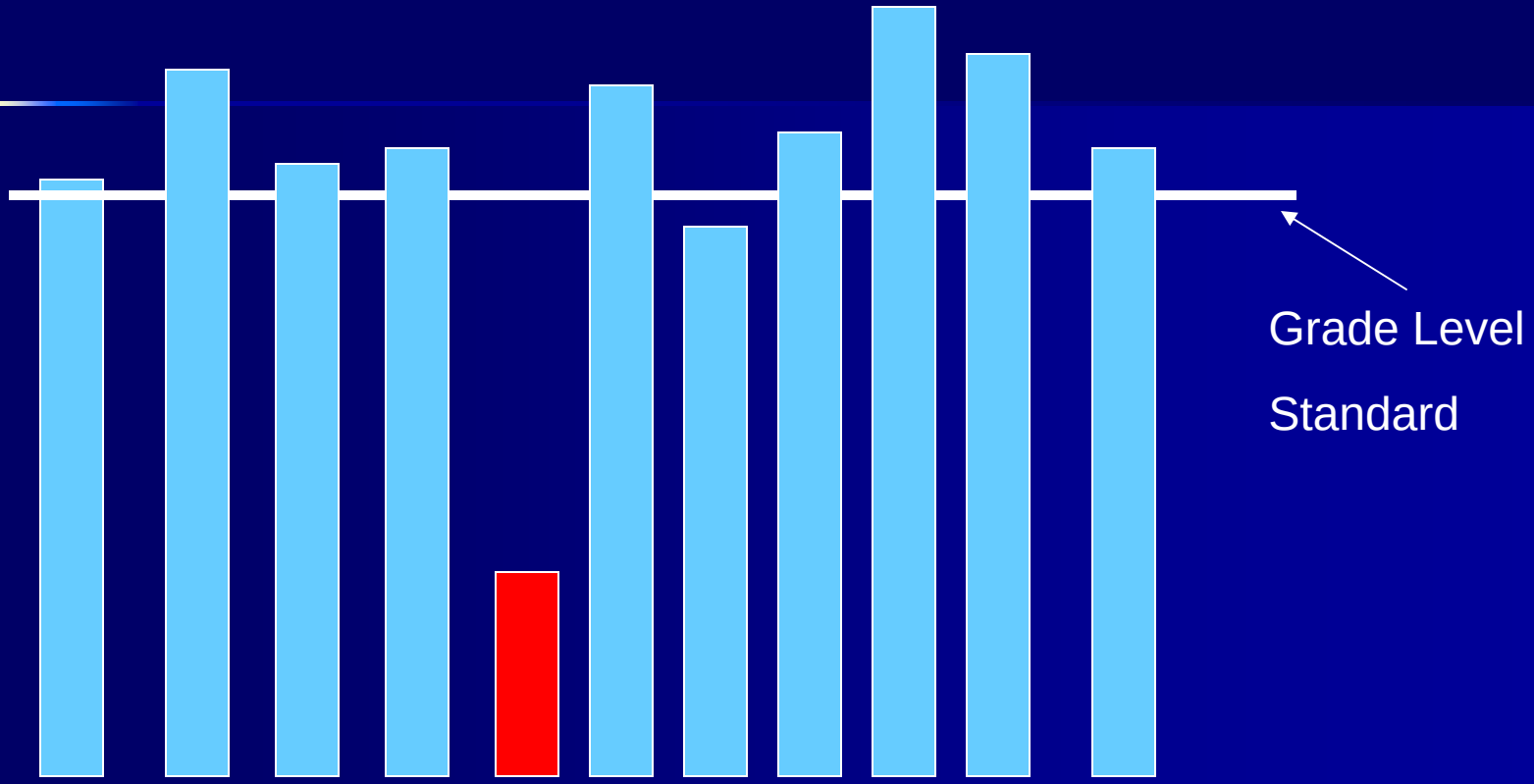
- Improving Achievement
  - Reduces teacher concern
  - Improved achievement for all students reduces need for SPED
  - Produces great JOY for teachers and administrators

# **In Plain Language:** What the Experts are Saying

- What do you do for Low Achieving Students? Teach them.
- If you have already been teaching them, teach them differently. No ONE thing works for all.
- This is called intervention. It is special teaching for students with low achievement.
- If you try many good things with a student and they don't learn, then maybe the student has a learning "issue".
- In dealing with the "issue", you may need the additional help of special education.

# Core principle #4: Intervention

# What if Kalisha's Class is OK but She is Struggling?

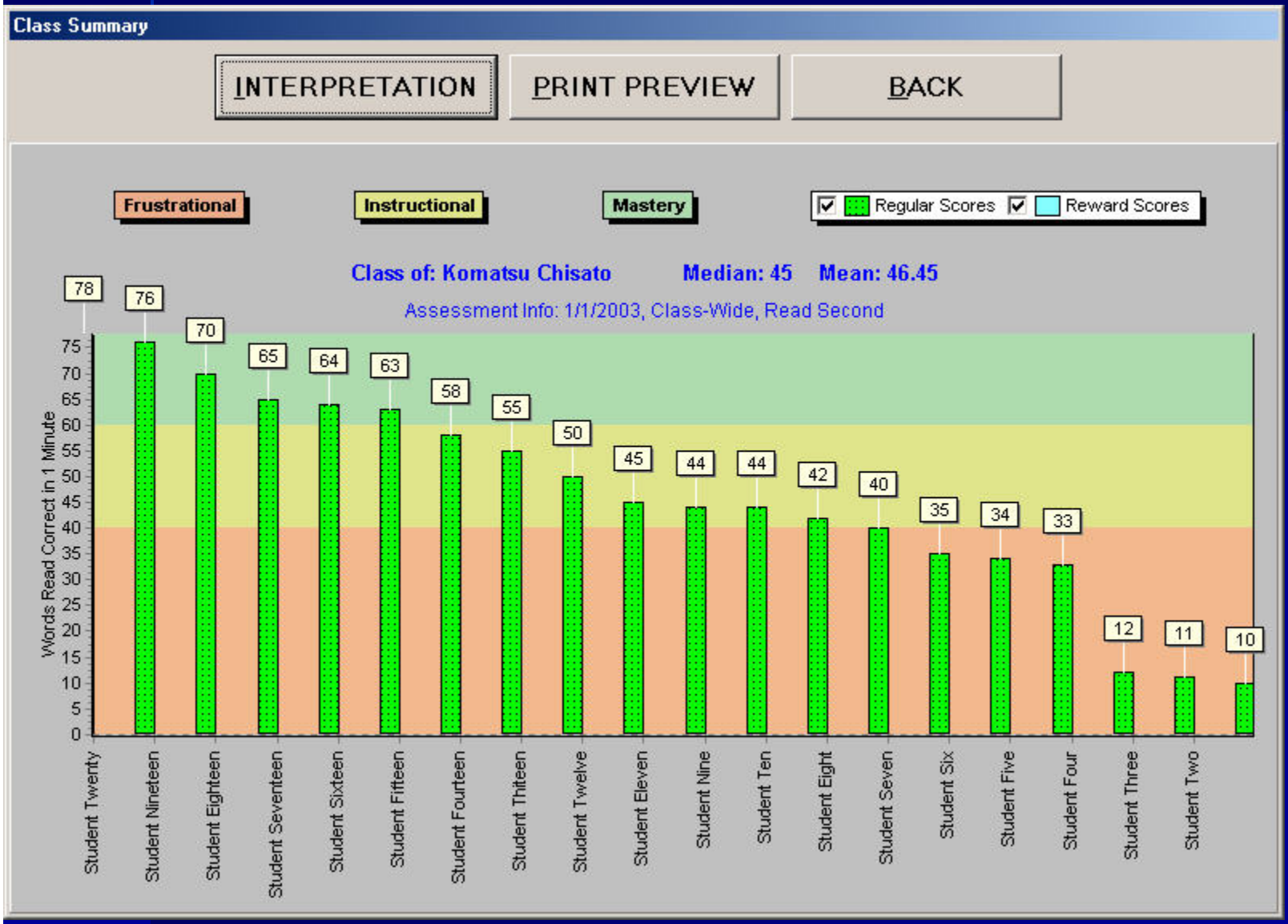



Kalisha Sticks out Like a Sore Thumb



Core curriculum working for most but not her

# Example from STEEP showing typical class. No problems with Core. Three students at risk.




**Green**

**Yellow**

**Red**

# Intervention at Tier 2

- Supplemental Instruction
  - Good solid instruction
  - Covers all the bases
  - Essential components of Reading
- Progress Monitoring is Started
- Progress evaluated Frequently
- Response to Intervention Evaluated

# How Do You Select Intervention?

- Problem Solving Model
  - Team Meets
    - Defines problem, generates alternative solutions, team builds consensus
- Standard Protocol
  - Who need helps based upon data.
  - Choice of Intervention based on data
  - Data guides intervention selection


Problem Solving
Discussion
Team Review
PS Process
Define Problem
Generate Solutions
Team Review
Who
What
Outcome
Standard Protocol
Comparison to Benchmarks
Use Assessment to Select Intervention
Comparison To Expected Standards

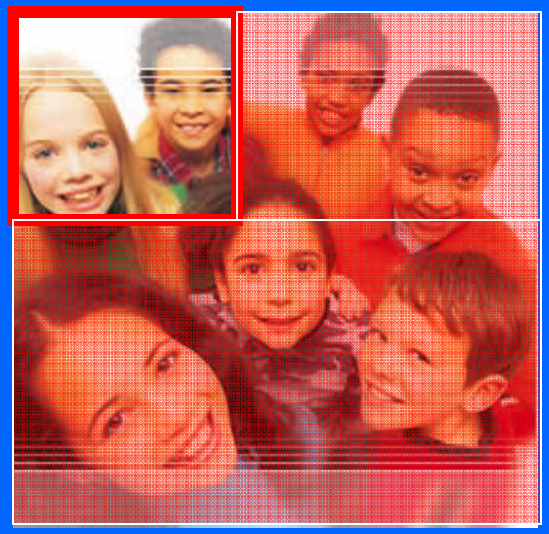
# Prescribing Interventions

- ”Students are Unique”
  - True
- They learn differently
  - True
- Still, Research based instruction
  - Works for MOST-- 90%
  - Why does it work
    - Research proven
    - Covers most of the important area

# Example from TPRI & TX Reading First: Who needs Help—Middle of Year

- Screening Assessment:
  - Story 4 from Second Grade Assessment
- Decision Rule
  - Score at or above 75 WCPM
    - Satisfactory performance
  - Score below 75 WCPM
    - Move to intervention in Tier 2

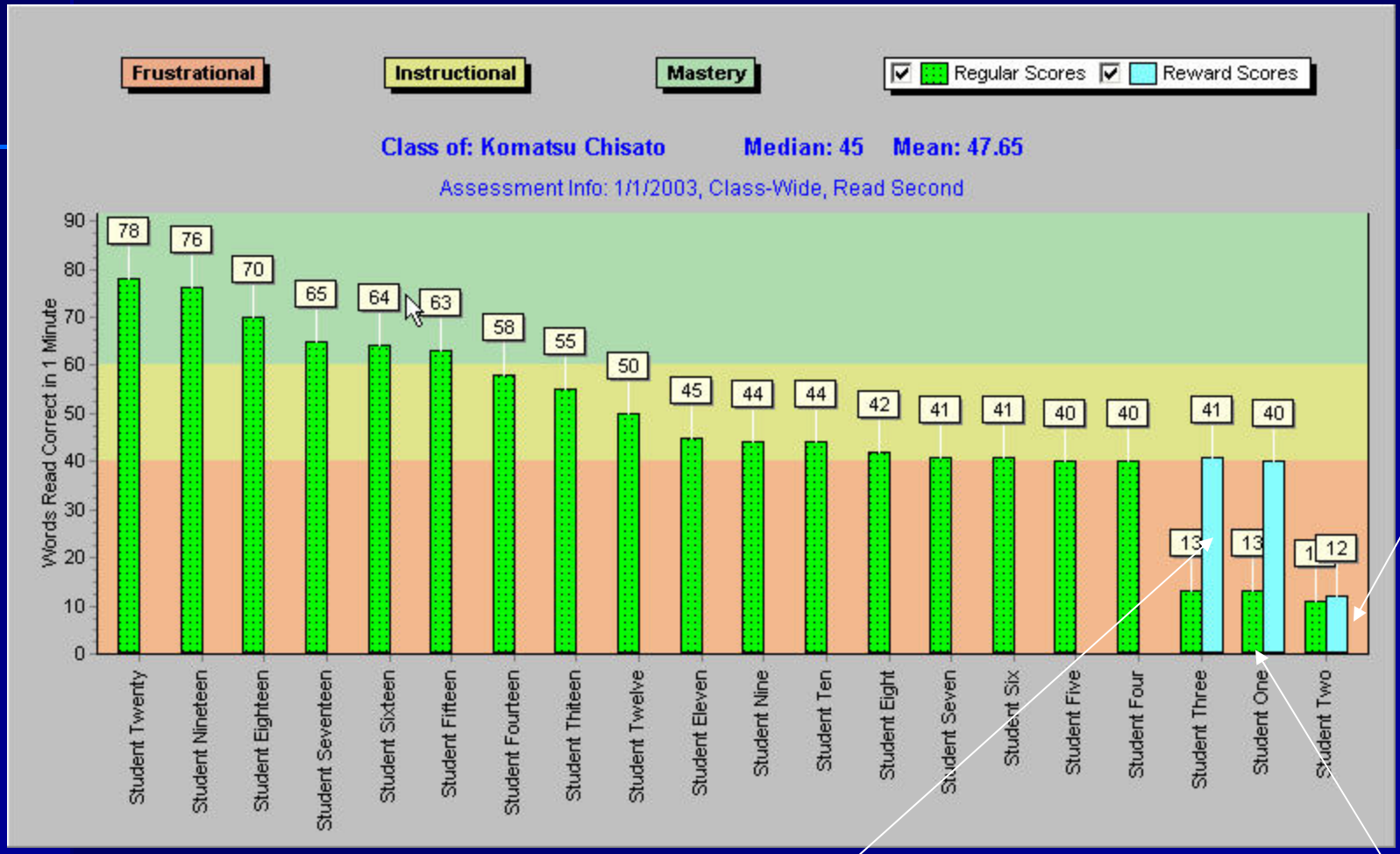
Targeted for Tier 2 Intervention



**Which Students are OK and Who Need Assistance?**

**Second Grade, Mid Year: Who is Reading 74 or Less on TPRI**

# Selecting the Right Intervention: Example from STEEP.
# STEP 1: Is the problem a skill deficit or motivation?

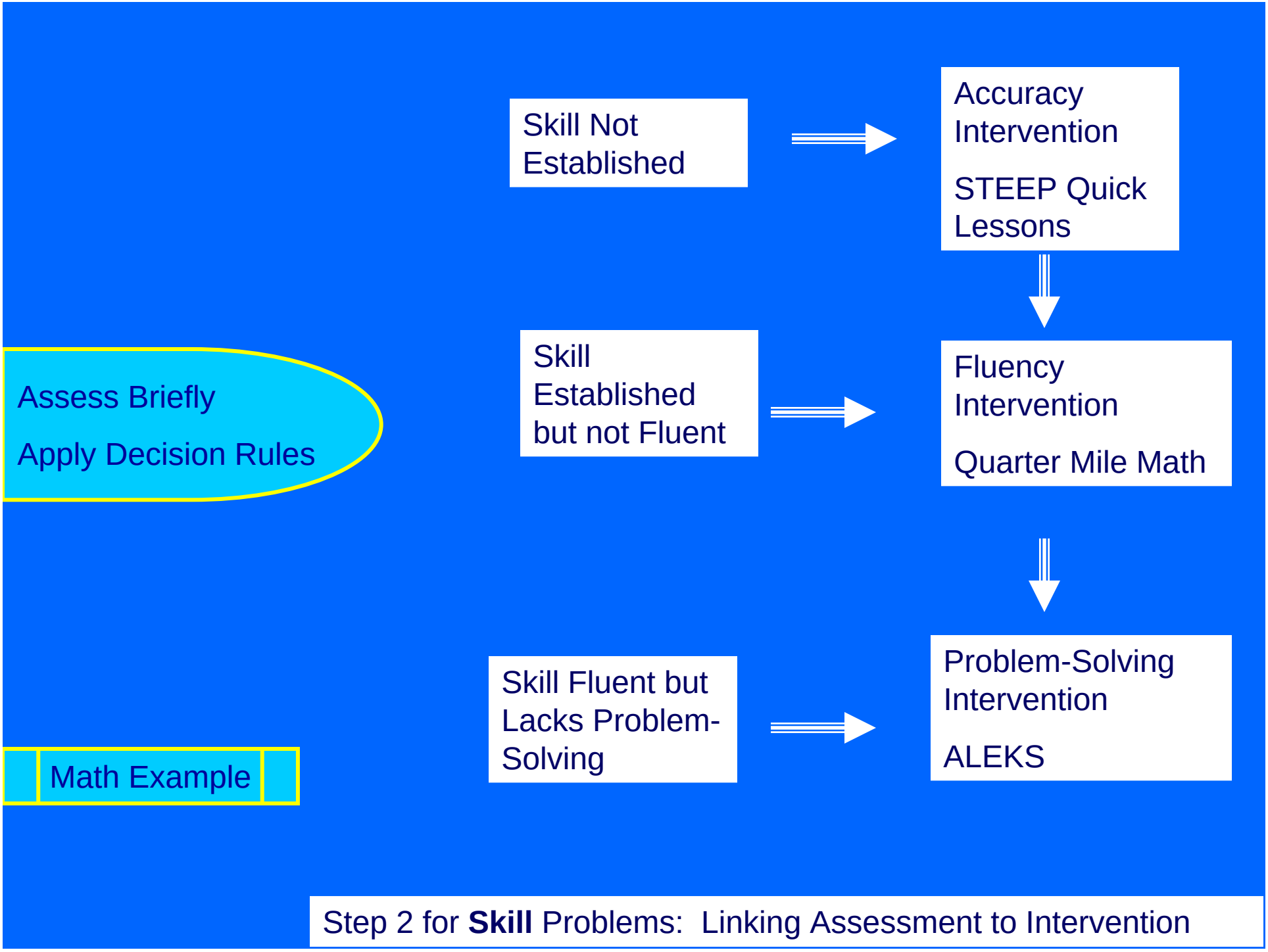



Can't Do

**Lack of Motivation is NOT a Disability**

# Sorting by Numbers

- Select Students
  - Sort #1: Who is at Risk Bottom 16% and Not Meeting Benchmark
  - Sort # 2 is Problem Can't or Won't
  - Based on assessment data
- Select Intervention
  - Assess and apply rules to choose SPECIFIC intervention
- Progress Monitoring
  - Decision Rules about Who is *RESPONDING*


Skill Not Established
Accuracy Intervention
STEEP Quick Lessons
Skill Established but not Fluent
Fluency Intervention
Quarter Mile Math
Assess Briefly
Apply Decision Rules
Skill Fluent but Lacks Problem-Solving
Problem-Solving Intervention
ALEKS
Math Example
Step 2 for **Skill** Problems: Linking Assessment to Intervention

| Skill | Measure | Benchmark | Intervention | Progress Monitoring |
|---|---|---|---|---|
| Letters / Sounds | Letter Sound Fluency Probe | 40 | PALS | Letter Sound Fluency Probe |
| Fluency | Oral Reading Fluency | 60 | Reading Center | Oral Reading Fluency |
| Understanding / Comprehension | Mazes | 15 | Thinking Reader | Sentence Comprehension |
| In<br>Int | Comprehen. | 10 | Red Herrings | Spargo Comprehen |

Caution: Reading Comprehension an Emerging Area

Sample STEEP Intervention Matrix in Reading—Modified per District Resources

[1] Source: Early Reading First (http://www.ed.gov/policy/elsec/leg/esea02/pg5.html#sec1221)
[2] Source: National Assessment of Educational Progress

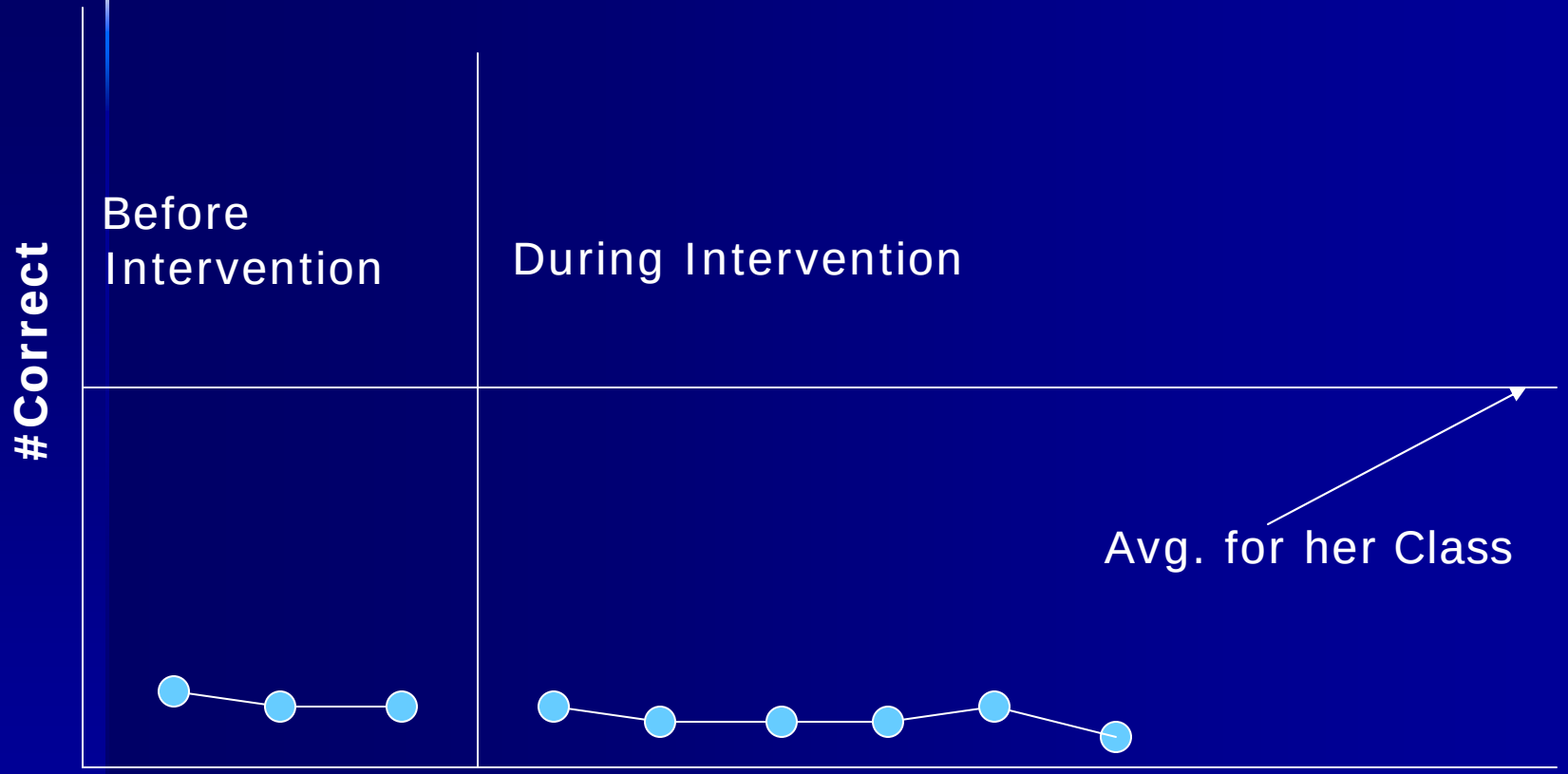
# To Summarize

- Selecting intervention
  - Problem solving
    - Brainstorming, generate solutions, build consensus
  - Standard Protocol
    - Use rules about WHO
    - Use Rules based on Data to Select a research based intervention
    - Next rules about “is it working”

Core principle #5: Progress Monitoring Or Formative Evaluation

- Brief Assessments
- Before and During Intervention
- Examine Assessments
  - Are Dots Going Up the Page?

# No Response to intervention



# Goals of Tier 2 Intervention

- To reduce the gap
- To rule out ABT
  - Can't be done with Woodcock or any other test.
  - Testing can't know she wasn't taught effectively!!!
  - The only way to determine if student can learn normally is to teach and look at student's response

# New Ideas about Intervention within RTI

- Traditional special education is called a "wait to fail" process.
  - Wait for students to fail then place
- RTI is Proactive
  - Find students in Need *earlY*
  - Provide assistance
- IF referral comes then documentation of RTI (or lack of) is present

# New Ideas about Intervention

- New Purpose of intervention
  - To Address *Assessment* Questions
  - Can child learn normally?
- If the assessment is an intervention
  - Important decisions are made
  - Due process considerations
  - **Intervention must be done**
    - **And Done Correctly**

# New Ideas: Types of Intervention

- Current Practice
  - Every child has collaboratively developed individual intervention
  - Problems
    - Not evidenced based
    - No one is an expert
    - Materials must be assembled
- New Way
  - More Prescriptive
  - Fewer Choices Materials Readied—Pre-training
  - Computer based

# It is far better to

- Know a few multi-purpose interventions well
- Have a decision-making system
  - Problem Analysis can take long time with Weak Team
- Have materials prepared
- Have progress monitoring set up
- Be able to teach and **support** the teacher using tell, show, do.

# New Ideas: Use of Intervention Results

- Old Way
  - We did the intervention now lets place
- New Way—Results tell us:
  - Can child learn at normal rate?
    - Rule out ABT
  - What intensity of services are needed?
  - Progress should compare apples to apples
    - The expected response to a reading comp intervention MAY differ for ELL
  - Special education is a LOCATION for intensive

# New Ideas: Intervention Fidelity

- Old Way:
  - How do you KNOW Intervention was implemented. Teacher report
- New Way
  - Permanent Products
    - Interventions leave evidence of use
    - Computer interventions produce reports
  - No evidence—no refer.
- This is an eye opener

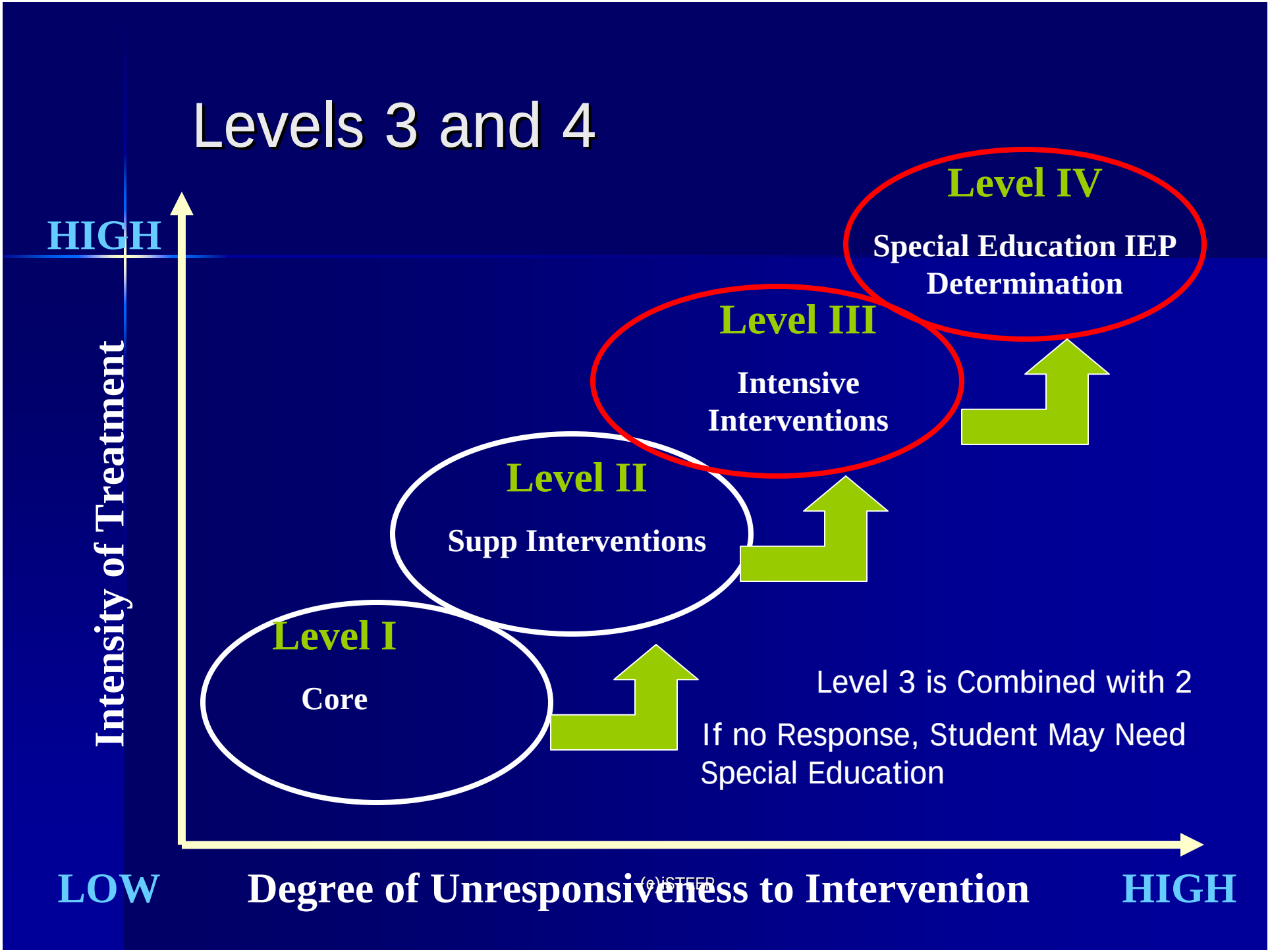
# Two Problems You will have to Address

- Teams don't know which intervention to use
- Teachers struggle with individual intervention
  - Examine other options for intervention delivery.

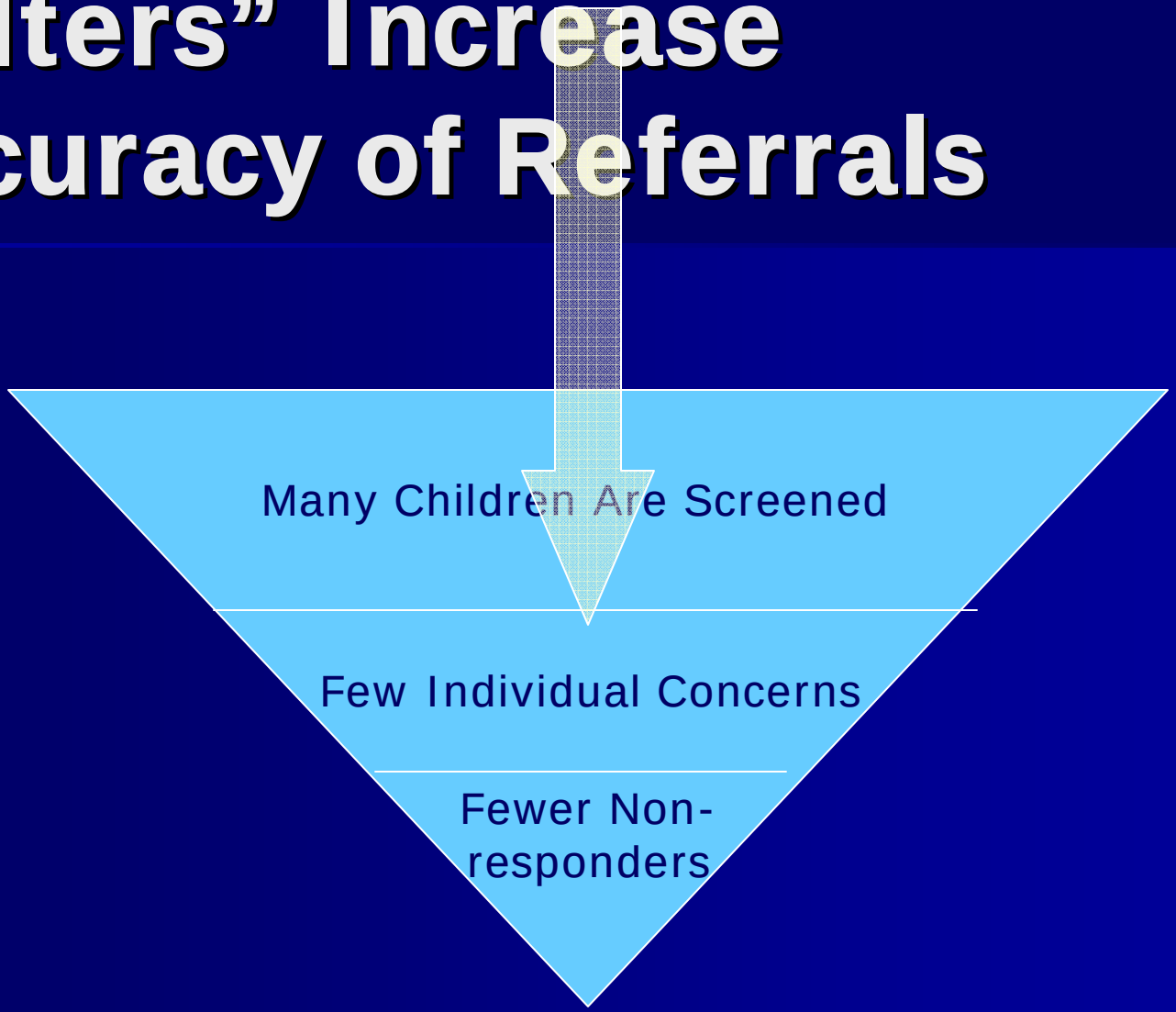
# In Summary

- Tier 2 is putting an intervention in place
- Nationally 80% of pre-referral intervention fail
- Research based intervention
  - Successful 90%+
  - Shared process between general and special education with both contributing to success

# Levels 3 and 4



# “Filters” Increase Accuracy of Referrals




Even Less Require Add’l Evaluaion

# Lessons Learned

States

Districts

# State Implementation: A Structured Approach

- In getting started with RTI, states may consider the following Phases
  - Readiness phase.
  - Training phase.
  - Implementation phase.
  - Policy and Procedures phase.

# Readiness Phase

- Assessment of State Readiness for RTI
  - Can RTI be integrated with other programs
- Build awareness and consensus about state RTI plan.

# Initial Challenges

- Districts are moving ahead w/o state
- Integration with other programs (Reading 1st)
- Groups and advocates may be resistant to loss of discrepancy model

# Decisions Faced by States

Require specific type of screening?

- Or, allow flexibility while requiring valid and reliable assessment
- If flexible, then emphasize research based core components

- Beyond Reading
  - Math, Listening Comprehension, etc
- Beyond K-6
  - Middle and High School

# Phase II: Training

- Awareness training with teachers administrators
- Deeper training with implementers
  - Ideally job integrated
  - Coaching and support
- Pre-service—Involvement of Universities, e-learning courses

# Training Must be Comprehensive

- Training must include all of the core components of RTI.
- Some commercial training programs focus on Screening and Progress Monitoring and others on Procedural Details.
- RTI training must not focus on some areas to the exclusion of others.

# Training is Ongoing

- Training is typically ongoing because
  - RTI has a lot of moving parts
  - Professionals can't appreciate and are not ready for more advanced topics until they begin to feel comfortable with the basics.
  - RTI is an evolving -new information is continually becoming available.

# Phase III: Implementation Tools

- State Lead or Leadership Team
- Tools, Materials
  - Assessment
    - Screening Materials
    - Progress Monitoring Materials
  - Data Management Systems
  - Interventions

# Implementation Procedures

- Issues range from basic to highly technical
  - What counts as a Tier 2 intervention
  - How long must it be implemented
  - How frequently is progress monitoring
  - What data tells you to move up a tier
  - How do you assess fidelity

# Phase IV: Policy and Procedures

- Without Final Regulations
  - States are piloting research based procedures pertaining to
    - Screening cut points
    - Intervention selection and fidelity
    - Movement through the tiers
    - Eligibility determination
    - Establishing a timeline and sequence of procedures to be used.

# At the District Level

Lessons Learned and Outcomes

# Lessons Learned

Professionals from Biloxi schools offered the following lessons learned after 2 Years of implementation.:

1. Commitment. Everyone within the district should be committed to the process including the special education director, principals, school psychologists, special education teachers, early intervention pre school teachers, teachers, and speech and language pathologists.
2. Administrative support. Strong support from general education administrators including the superintendent was a key factor.
3. General education ownership. Each school assists in every part of the process and will take ownership after two years.
4. Pay careful attention to the daily requirements. Students are placed in interventions based on the screening data and team input. The interventions are reviewed every week for 6 weeks.
5. Progress Monitoring is Critical. Our personnel take progress monitoring seriously and it is completed weekly no matter what. progress monitoring graphs via the web every Friday. If they notice any issues, or any problems, then this information is emailed to the principals each Friday.
6. Periodic review. Progress monitoring data are reviewed with grade level teams every 3 weeks and intervention changes are made at those meetings if needed. At the end of 6 weeks a decision is made as to whether to continue the intervention, discontinue or refer to Tier 3 services.

# STEEP in Biloxi, MS

- Referrals per school
  - 20 to 25 Per School Prior to STEEP
  - In 2004-2005, 1 Referral Per School
  - This Year No Referrals
    - Across 7 schools, only 6 students at Tier 2
- Standard Protocol
  - Tier 2 Interventions Successful in 90%+ of Cases

# Vail, AZ

- STEEP RTI Improved state test scores
  - For All Students in General Education
    - Vanderheyden and Burns (2005)
- Reduced Referrals
  - Vanderheyden et al
- Increased Referral Accuracy

# Kalisha

## OLD WAY

- Wait to fail
- Test her using
  - Block design
  - Woodcock her
- Compare to National Norms
- Place

## NEW WAY

- Screen early-help early
- Compare to local norms
- Intervene
- Use intervention response to determine child needs

# Kalisha using RTI via NCLB and IDEA

- Evidenced based core to prevent failure
- Universal screening to detect Kalisha when she is **slightly** behind
- Evidenced based Supplemental Instruction
- Intensive Individual Intervention
- New way: 95% Chance No SPED Needed
- Old way: 90% Chance SPED Needed

Kalisha Needs the Juice: I-N-S-T-R-U-C-T-I-O-N

# Everybody Wins

- Kalisha stays in general education
- Teacher is less concerned because she got the juice—achievement up. Faster services.
- Diagnostic and SPED professionals—
  - Put their full skill set to good use
  - More time for difficult cases
  - More accurate referrals

# Gene Lenz

"How can we return home, look people in the eye, and keep doing things the same way."

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