Next Year Is Now

William L. Heward
The Ohio State University
2017 National Autism Conference

2016!

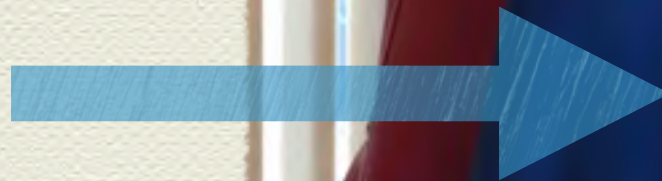Tyler Lewis talks about His Progress in the General Education Curriculum
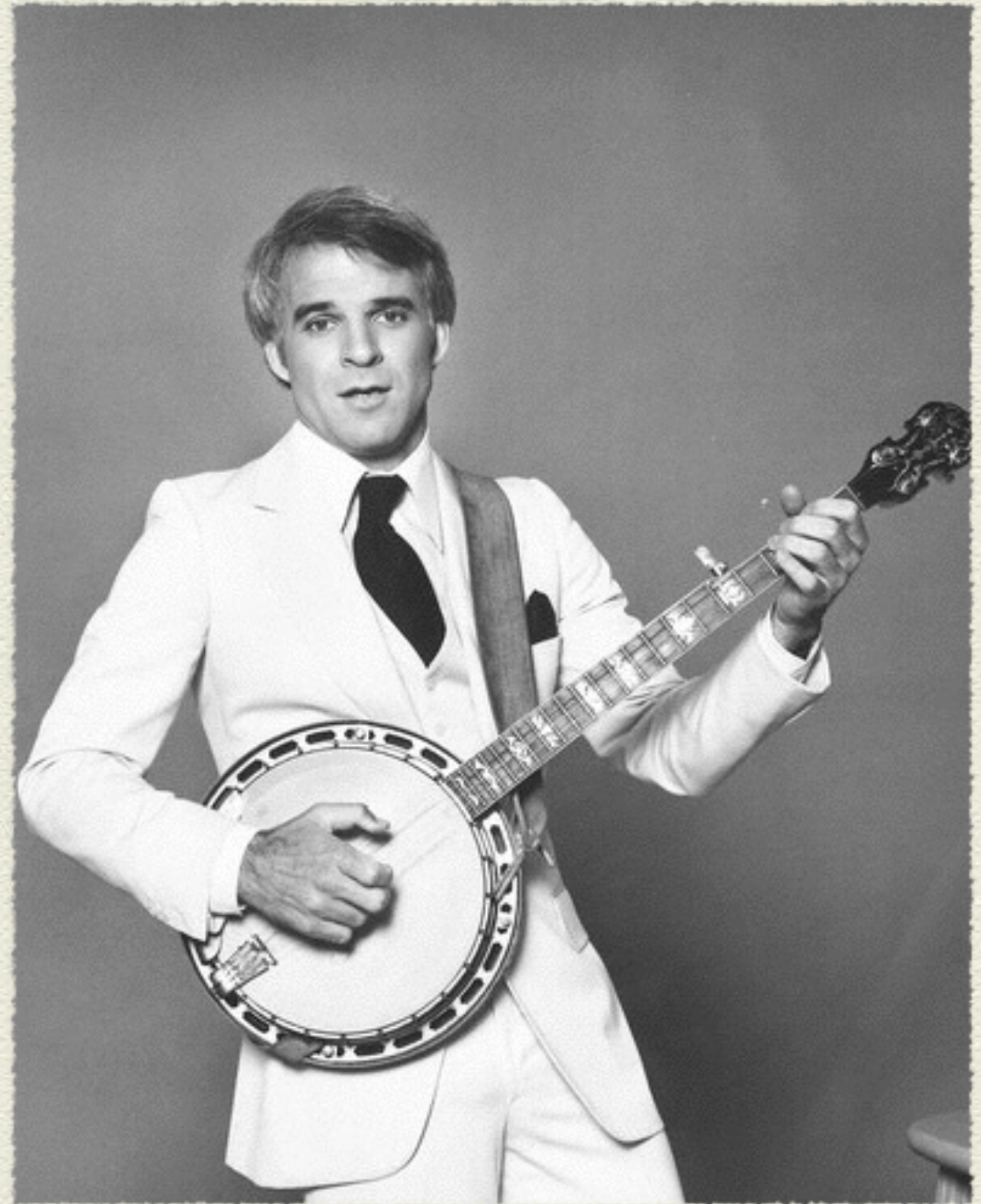
Tyler Lewis: 9th grader (2012)

Tyler Lewis today

How to become
a millionaire.

First, get a million dollars.

Steve Martin

FERGUSON JENKINS, CUBS, RIGHTHANDED PITCHER.

JOE MORGAN, REDS, SECOND BASE

RON SANTO, CUBS, THIRD BASE

BROOKS ROBINSON, ORIOLES, THIRD BASE

ROD CAREW, TWINS, SECOND BASE

GAYLORD PERRY, INDIANS, RIGHTHANDED PITCHER

STEVE CARLTON, PHILLIES, LEFTHANDED PITCHER and PITCHER of the YEAR

JOHNNY BENCH, REDS, CATCHER

SPORTING NEWS
ALL-STAR TEAM
1972

CARLTON FISK, RED SOX, CATCHER

WILBUR WOOD, WHITE SOX, PITCHER of the YEAR and LEFTHANDED PITCHER

ROBERTO CLEMENTE, PIRATES, RIGHT FIELD

RICHIE SCHEINBLUM, ROYALS, RIGHT FIELD

WILLIE STARGELL, PIRATES, FIRST BASE

BILLY WILLIAMS, CUBS, PLAYER of the YEAR and LEFT FIELD

CHRIS SPEIER, GIANTS, SHORTSTOP

CESAR CEDENO, ASTROS, CENTER FIELD

BOBBY MURCER, YANKEES, CENTER FIELD

LUIS APARICIO, RED SOX, SHORTSTOP

DICK ALLEN, WHITE SOX, PLAYER of the YEAR AND FIRST BASE

JOE RUDI, ATHLETICS, LEFT FIELD

My All Star Team

Ernie Banks - Don Baer - Yogi Berra
Benjamin Bloom - Rodney Cavanaugh
W. C. Fields - Dirty Harry - Temple Grandin
Rogers Hornsby - Lord Kelvin - Bill Klem
Steve Martin – "Bobo" Nickerson - Tom Lovitt
Dick Malott - Ellen Reese - B. F. Skinner
Ronnie Hochman Spratt - Casey Stengel
Cathy Watkins - Ron Van Houten

Why is ABA the basis for the most effective education and treatment for children with autism?

ABA is the discipline that has most consistently studied the problem of what behavior changes, made in what order and by what techniques, will confer the maximal benefit to the child.

~ Donald M. Baer (2005)

What are the usual behavior changes ABA chooses for children with autism?

The highest priority often is *communication skills, ..* to give the child more and more control of the social environment.

~ Don Baer (2005)

What are the usual behavior changes ABA chooses for children with autism?

The next priority is *social skills*, to make the child endearing to the parents and acceptable to others, and again to give the child more and more control of the social environment, of the kind that the social environment finds desirable or acceptable.

~ Don Baer (2005)

What behavior changes are most important?

Learning *independence skills* enables a child to control his physical environment and become a self-directed learner.

~ Don Baer (2005)

1. Click on Activity Photo
2. Look at Video
3. Look at Cue to Play
4. Initiate Activity
5. Do Activity
6. Put Materials Away

Suggestions for Teachers

The teacher's job

design, implement, and evaluate instruction by which children acquire, generalize, and maintain new knowledge and skills that improve the *quality of their lives*.

Suggestions for teachers

- Take the long view (because next year is now)
- Realize you can't teach everything

You can't teach everything a student with autism needs to learn

- Attempting to treat all of a student's learning needs at once invites failure. Neither the student nor his teacher(s) can devote the time and resources needed for so many behavior changes.

- Sometimes "thinking small" leads to the biggest learning gains because it focuses instructional resources on the most important and accessible behavior changes

- Narrow the field of potential target behaviors by first judging the relevance of each candidate, then prioritizing the most relevant ones.

Judging the Relevance of a Target Behavior

Client's/Student's name: _____ Date: _____

Person completing worksheet: _____

Rater's relationship to client/student: _____

Behavior: _____

Considerations	Assessment			Rationale/Comments
Is this behavior likely to produce reinforcement in the client's natural environment after intervention ends?	Yes	No	Not sure	
Is this behavior a necessary prerequisite for a more complex and functional skill?	Yes	No	Not sure	
Will this behavior increase the client's access to environments in which other important behaviors can be acquired and used?	Yes	No	Not sure	
Will changing this behavior predispose others to interact with the client in a more appropriate and supportive manner?	Yes	No	Not sure	
Is this behavior a pivotal behavior or behavioral cusp?	Yes	No	Not sure	
Is this an age-appropriate behavior?	Yes	No	Not sure	
If this behavior is to be reduced or eliminated from the client's repertoire, has an adaptive and functional behavior been selected to replace it?	Yes	No	Not sure	
Does this behavior represent the actual problem/goal, or is it only indirectly related?	Yes	No	Not sure	
Is this "just talk," or is it the real behavior of interest?	Yes	No	Not sure	
If the goal itself is not a specific behavior (e.g., losing 20 lbs.), will this behavior help achieve it?	Yes	No	Not sure	

Summary notes/comments: _____

Prioritizing Potential Target Behaviors

Client's/Student's name: _____ Date: _____

Person completing worksheet: _____

Rater's relationship to client/student: _____

Directions: Use the key below to rank each potential target behavior by the extent to which it meets or fulfills each prioritization criteria. Add each team member's ranking of each potential target behavior. The behavior(s) with the highest total scores would presumably be the highest priority for intervention. Other criteria relevant to a particular program or individual's situation can be added, and the criteria can be differentially weighted.

Key: 0 = No or Never; 1 = Rarely; 2 = Maybe or Sometimes; 3 = Probably or Usually; 4 = Yes or Always

Potential Target Behaviors

(1) _____ (2) _____ (3) _____ (4) _____

Prioritization Criteria

Criteria	(1)	(2)	(3)	(4)
Does this behavior pose danger to the person or to others?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
How many opportunities will the person have to use this new skill in the natural environment? or How often does the problem behavior occur?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
How long-standing is the problem or skill deficit?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
Will changing this behavior produce a higher rate of reinforcement for the person?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
What is the relative importance of this target behavior to future skill development and independent functioning?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
Will changing this behavior reduce negative or unwanted attention from others?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
Will changing this behavior produce reinforcement for significant others?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
How likely is success in changing this behavior?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4
How much will it cost to change this behavior?	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4	0 1 2 3 4

Totals _____ _____ _____ _____

Source: *Applied Behavior Analysis* (2nd ed.) by J. O. Cooper, T. E. Heron, & W. L. Heward © 2007 by Pearson Education.

Set functional performance aims!

- functional behaviors produce reinforcement in the learner's natural environment
- consider relevant dimensions of behavior
  - accuracy (topography)
  - latency
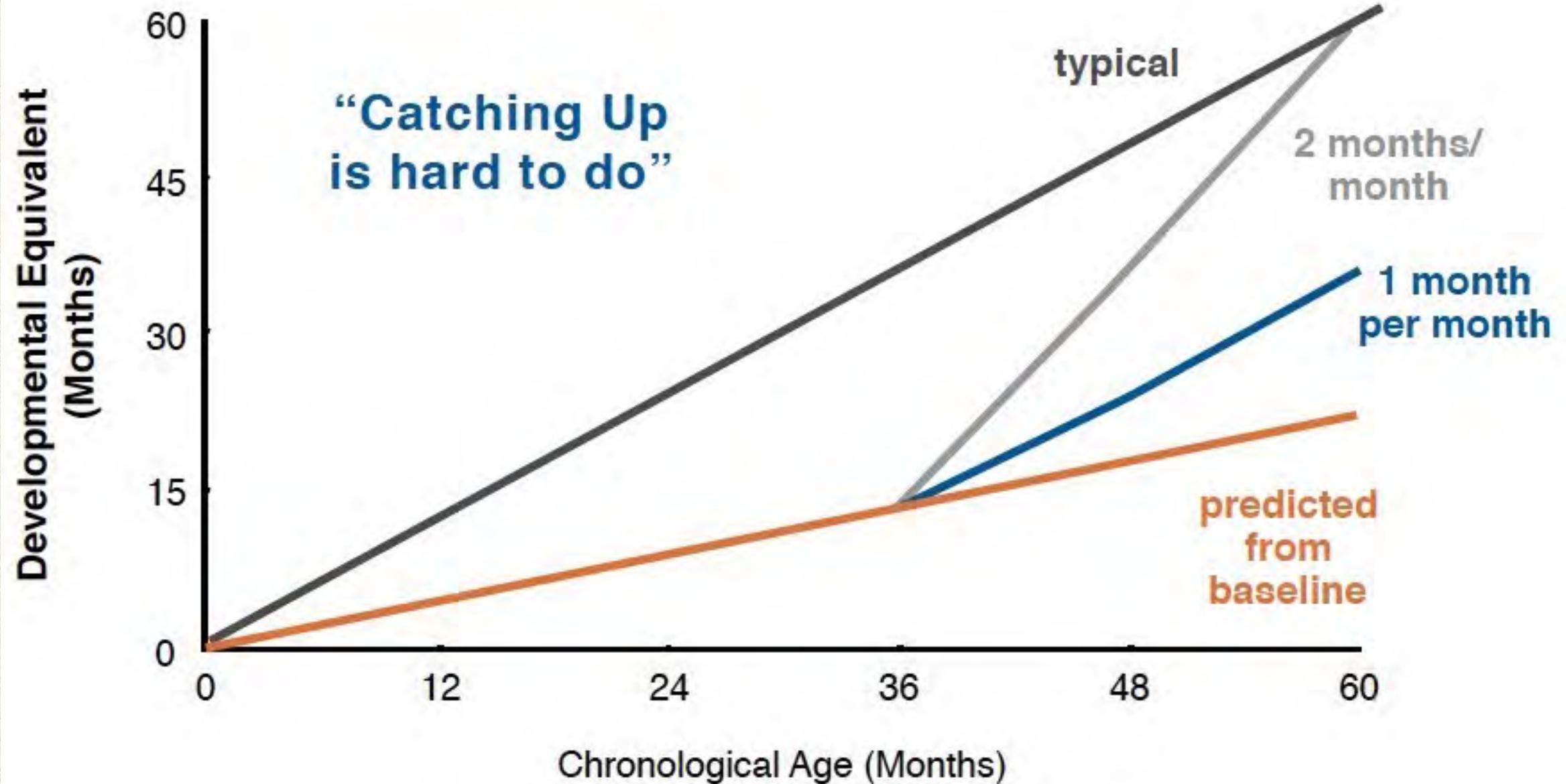 - duration
  - magnitude
  - rate

Suggestions for teachers

- Take the long view (because next year is now)
- Realize you can't teach everything
- Design and deliver lessons for maximum effectiveness and efficiency

It's a race against the clock

- students with ASD behind typically developing peers

- they must be taught more in less time or fall even farther behind

EXPRESSIVE LANGUAGE TRAJECTORIES

"Catching Up is hard to do"

typical

2 months/ month

1 month per month

predicted from baseline

Developmental Equivalent (Months)

Chronological Age (Months)

Source: Jane Howard, "Intensive Behavior Analytic and Eclectic Interventions for Children with Autism: Data for Decision Makers" April 2016, International ABA Conference, Bucharest, Romania.

It's a race against the clock

- students with ASD behind typically developing peers
- they must be taught more in less time or fall even farther behind
- instructional time a precious commodity

We are a much improved ball club,
now we lose in extra innings!
Casey Stengel - New York Mets Manager, 1963

It's a race against the clock

- students with ASD behind typically developing peers

- they must be taught more in less time or fall even farther behind

- instructional time a precious commodity

- every lesson must be planned and delivered with optimal effectiveness as its goal

- use only teaching methods with proven effectiveness

Focus on alterable variables

- reliably affect student learning
- can be controlled by teaching practices

~ Benjamin Bloom

Active student responding: A kingpin alterable variable

- ASR occurs when a student makes a detectable response to the lesson.

- High-ASR lessons produce more learning than lessons in which students make few responses or passively attend.

- Teachers know active student participation is important.

- The challenge: providing all students with frequent opportunities to respond during group instruction.

Group instruction challenges teachers to ..

- maintain students' attention
- provide each student with sufficient opportunities to respond
- provide feedback for student responses
- prevent and deal with disruptive behavior
- monitor student learning

You gotta be low ball hitter and a high ball drinker.
Frank "Bobo" Nickerson

Tactics for increasing ASR in group lessons

- choral responding
- response cards
- guided notes and structured worksheets
- classwide peer tutoring
- fluency-building activities

Direct Instruction Reading Lesson
(Part A – Vocabulary & Fluency)
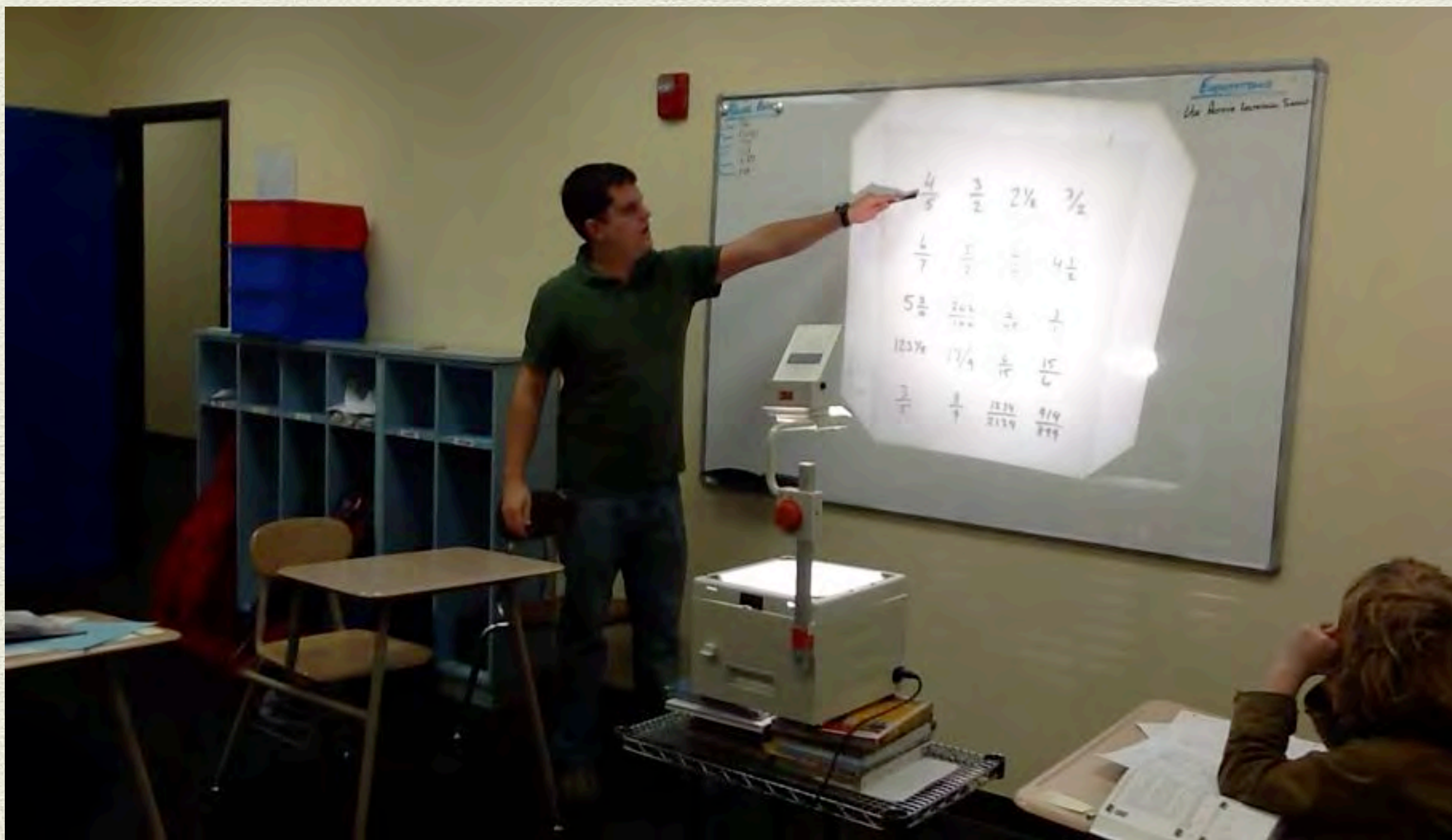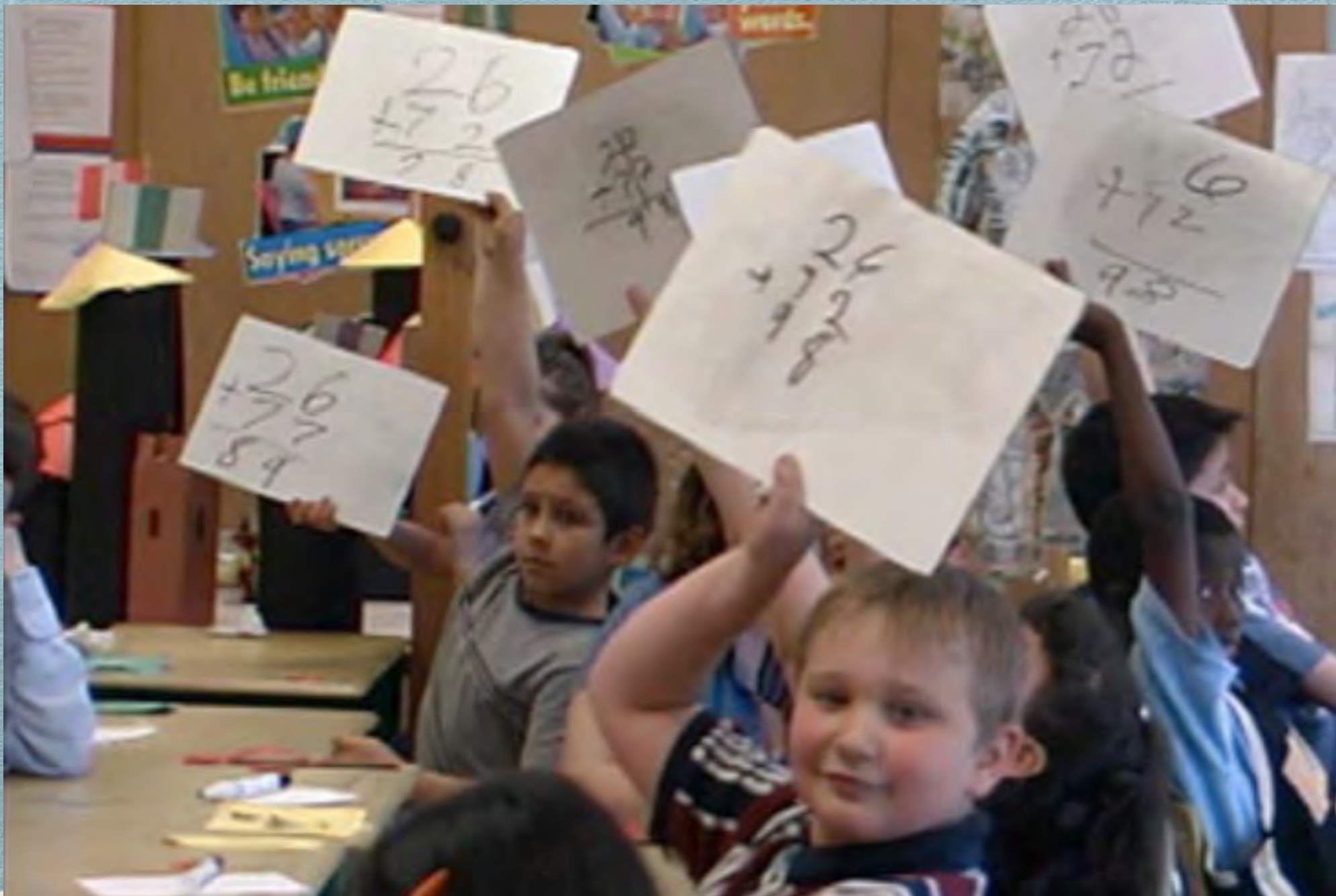
How much ASR is necessary?

"It takes what it takes." ~ Cathy Watkins

"Son, when you pitch a strike, Mr. Hornsby will let you know." ~ Umpire Bill Klem

Rogers Hornsby

Bill (It ain't nothin' 'til I call it) Klem

Plan and program for generalization and maintenance during the acquisition stage of learning

- Students who do not use newly learned knowledge and skills in relevant settings over time, do not experience an improved quality of life.

- "Train and hope" won't cut it.

- ABA research has identified strategies and tactics for promoting generalization and maintenance.

- Special educators should know these methods and skillfully use them.

Seed your lessons with secondary learning targets

INCORPORATING ADDITIONAL TARGETS INTO LEARNING TRIALS FOR INDIVIDUALS WITH AUTISM SPECTRUM DISORDER

CASEY L. NOTTINGHAM AND JASON C. VLADESCU

CALDWELL UNIVERSITY

AND

TIFFANY M. KODAK

UNIVERSITY OF WISCONSIN–MILWAUKEE

USING CONDITIONAL DISCRIMINATION TRAINING TO PRODUCE EMERGENT RELATIONS BETWEEN COINS AND THEIR VALUES IN CHILDREN WITH AUTISM

KRISTA S. KEINTZ

NEW ENGLAND CENTER FOR CHILDREN

CAIO F. MIGUEL

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

AND

BETTY KAO AND HEATHER E. FINN

NEW ENGLAND CENTER FOR CHILDREN

MATRIX TRAINING OF PRELITERACY SKILLS WITH PRESCHOOLERS WITH AUTISM

JUDAH B. AXE AND DIANE M. SAINATO

THE OHIO STATE UNIVERSITY

Prospective Instructional Design: Establishing Conditions for Emergent Learning
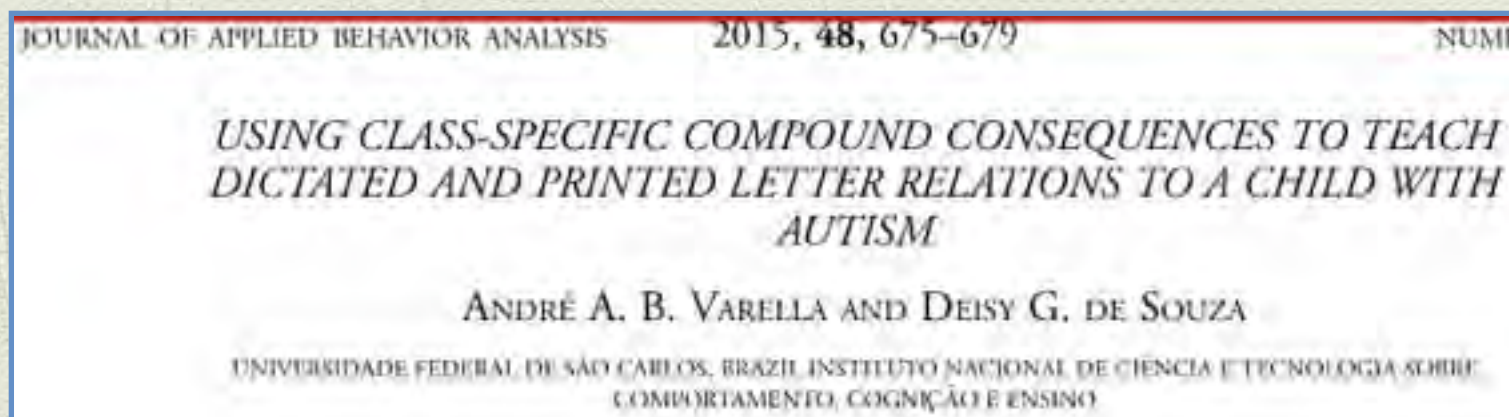
Thomas S. Critchfield

Illinois State University

Janet S. Twyman

USING CLASS-SPECIFIC COMPOUND CONSEQUENCES TO TEACH DICTATED AND PRINTED LETTER RELATIONS TO A CHILD WITH AUTISM

ANDRÉ A. B. VARELLA AND DEISY G. DE SOUZA

UNIVERSIDADE FEDERAL DE SÃO CARLOS, BRAZIL INSTITUTO NACIONAL DE CIÊNCIA E TECNOLOGIA SOBRE COMPORTAMENTO, COGNIÇÃO E ENSINO

Suggestions for teachers

- Take the long view (because next year is now)
- Realize you can't teach everything
- Design and deliver lessons for maximum effectiveness and efficiency
- Measure student performance and use those data to guide lesson modifications

You can observe a lot by watching.

~ *Yogi Berra*

When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind.

~ Lord Kelvin (circa 1883)
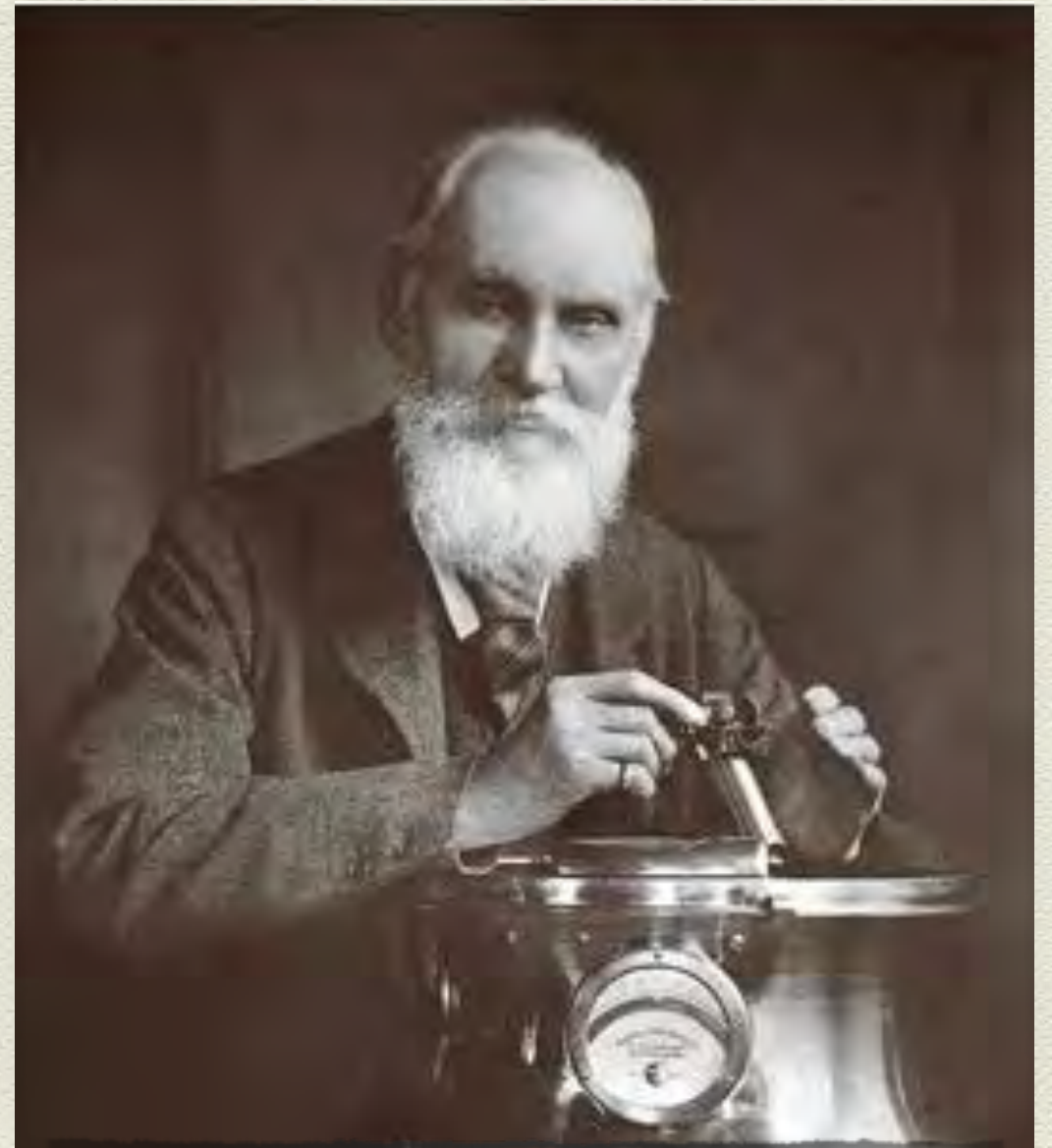
Direct and frequent measurement: The foundation of ABA

- Enables teachers to detect their successes and, equally important, their failures.

- Teachers who do not measure their students' performance are prone to two fundamental mistakes.

Suggestions for parents

- Give your child a variety of early work experiences

We've got to start working more on building up the kids' strengths. Kids .. often have uneven skills. Good at one thing, bad at something else. We need a lot more emphasis on building up the things they're good at — the things they can turn into a career.

- Temple Grandin

We should spend more time concentrating on these youngsters' positive qualities. If a girl is inclined toward mechanics, or a boy to being a chef, we should nurture those skills. And if a child doesn't have a negotiable behavior, we should locate one and promote it. … If children knew they could excel in something, that might help them become competent in other areas as well. ~ *Tom Lovitt*

Tom C. Lovitt (1930-2013)

Suggestions for parents

- Give your child a variety of early work experiences.

- Ask teachers who work with your child to provide regular data-based reports of progress ("Show me the data").

Suggestions for parents

- Give your child a variety of early work experiences.

- Ask teachers who work with your child to provide regular data-based reports of progress ("Show me the data").

- Tell the teachers who work with your child know how much you appreciate their efforts.

Reflections on Being
a Special Education Teacher

Suggestions for all of us

- Ensure success experiences for students.

Nothing succeeds like success!

Ronnie Hochman Spratt

It's possible to change behavior by punishing errors and ignoring correct behavior, but we learn more efficiently when correct behavior is acknowledged and reinforced.

~ *Ellen P. Reese*

"A very reinforcer is available. ..

.. It does not need to be contrived for instructional purposes; it is unrelated to any particular kind of behavior and hence always available. We call it success."

- B.F. Skinner (1989)

Try to keep your praise on the leading edge of the student's improvement.

~ *Ron Van Houten*
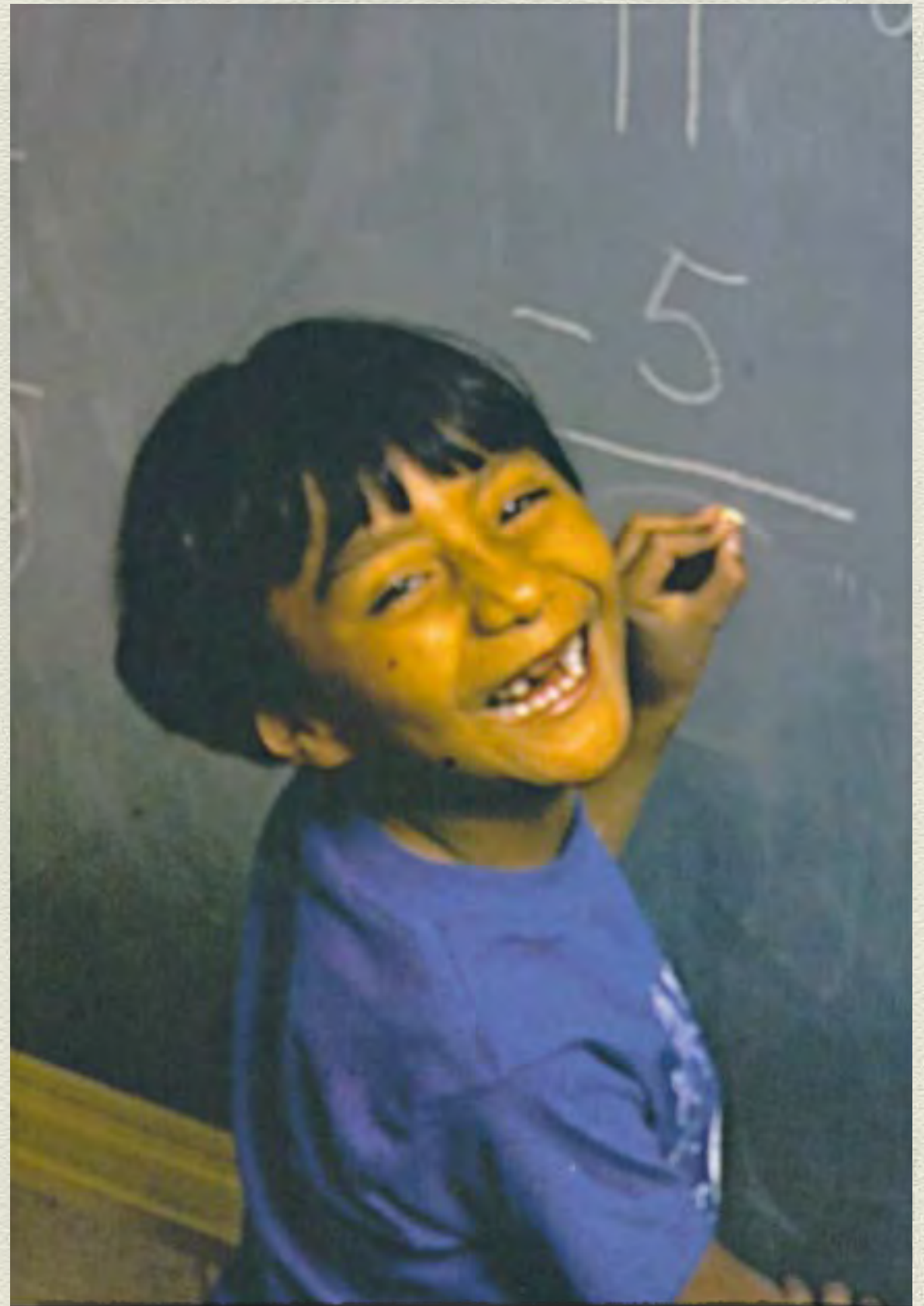
Set behavior traps

- "Baited" with powerful, virtually irresistible reinforcers that "lure" the student into the trap.

- Only a low-effort response already in the student's repertoire is necessary to enter the trap.

- Once inside, interrelated contingencies of reinforcement motivate the student to acquire, extend, and maintain targeted academic and/or social skills.

- Remain effective for a long time because the student shows relatively little, if any, satiation effects.

Ooooh, a present.

Suggestions for all of us

- Ensure success experiences for students.
- Be a team player.

1961 Little League Team - Three Oaks, MI

Laurice Joseph   Diane Sainto   Tim Heron   Ralph Gardner

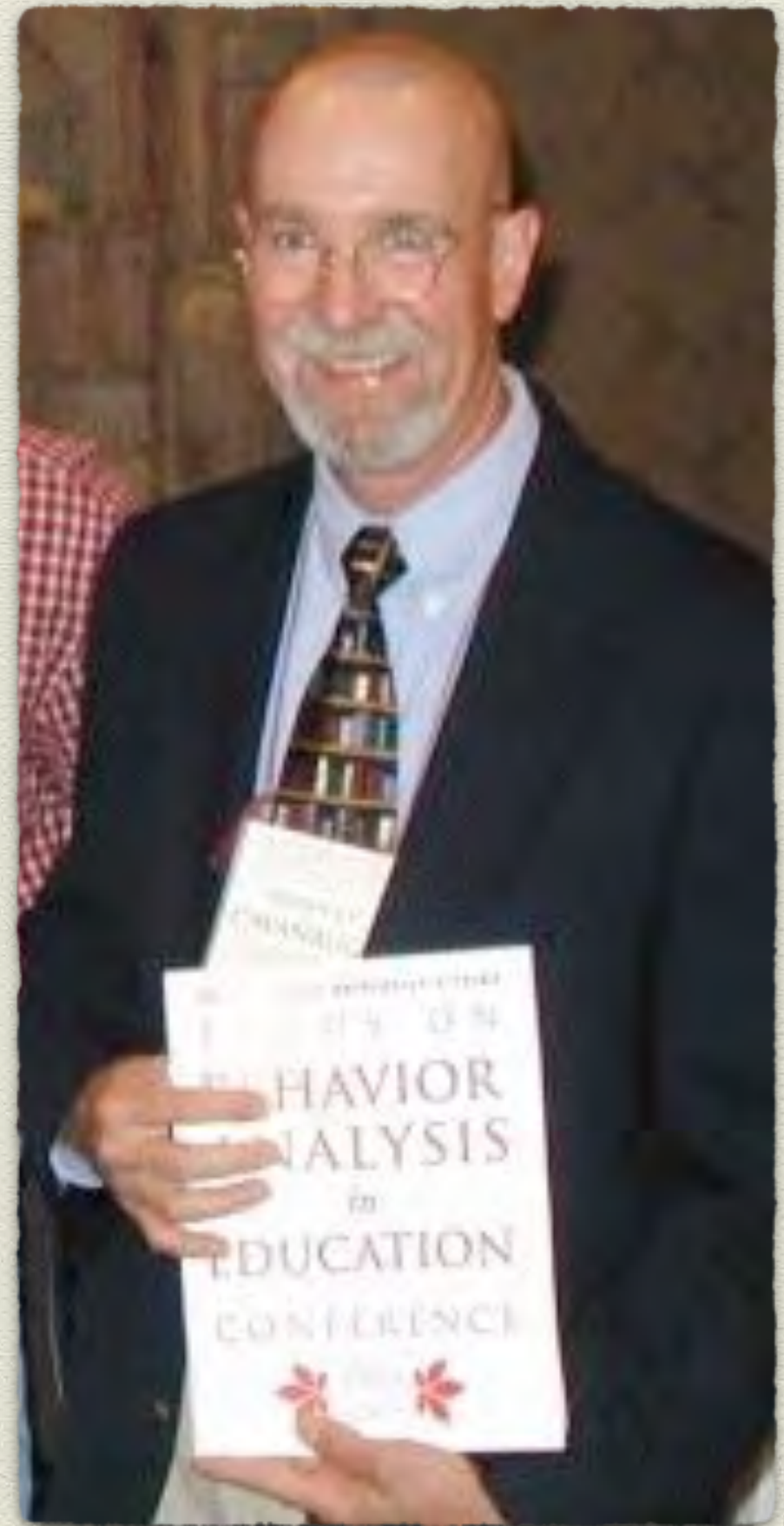Nancy Neef   Gwen Cartledge   Sheila Alber-Morgan   John Cooper

Vance Cotter (1934-1981)

Rodney Cavanaugh (1952-2007)

Suggestions for all of us

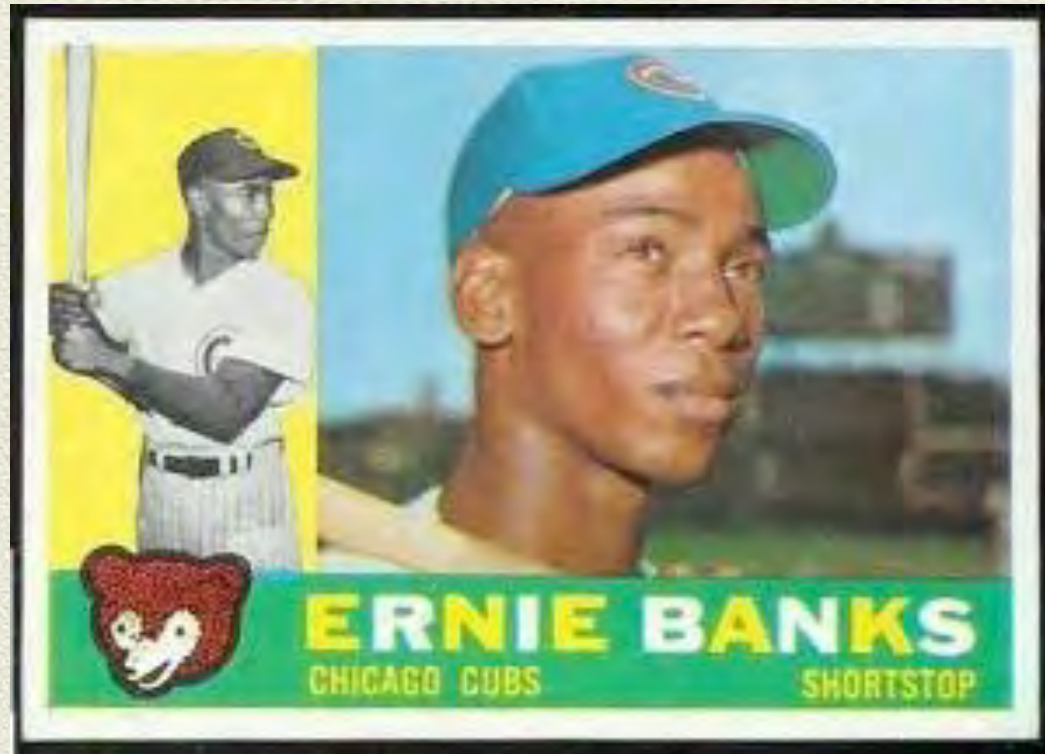- Ensure success experiences for students.
- Be a team player.
- Have fun.

"It's a great day for a ball game; let's play two!"

Suggestions for all of us

- Ensure success experiences for students.
- Be a team player.
- Have fun.
- Don't give up.

It all comes down to methods. Everybody wants results, but nobody wants to do what it takes.

Dirty Harry (Sudden Impact)

A failure is not always a mistake: it may simply be the best one can do under the circumstances. The real mistake is to stop trying. - B. F. Skinner.

Resources available on
at NAC 2017 website

"GOTCHA!"
Twenty-Five Behavior Traps Guaranteed to Extend Your Students' Academic and Social Skills

FIGURE 3.7   TEN GUIDELINES FOR COMMUNICATING WITH PARENTS AND FAMILIES

1. Don't assume that you know more about the child, his needs, and how those needs should be met than his parents do. If you make this assumption, you will usually be wrong and, worse, miss opportunities to obtain and provide meaningful information.

2. Junk the jargon. Educators whose speech is laced with technical terminology will have difficulty

Have Students Self-Manage Their Academic Performance
LAURICE M. JOSEPH AND MOIRA KONRAD

How to improve student learning in every classroom now
Janet S. Twyman[a], William L. Heward[b,*]

SCIENCE IN AUTISM TREATMENT
Newsletter of the Association for Science in Autism Treatment   Fall 2012

▼ A Parent Appreciation Letter
JILL C. DARDIG

It's Ok to Say I Don't Know:

Teaching Students to Recruit Positive Attention: A Review and Recommendations[1]

Behavior Traps: Turning Obsessions to Motivational Gold

Ten Faulty Notions About Teaching and Learning That Hinder the Effectiveness of Special Education