



THE UNIVERSITY *of* NORTH CAROLINA
GREENSBORO

COACHING TRANSFORMATION BASICS

Do something bigger altogether

Marcia L. Rock, Ph.D.

Aftynne Cheek, Jennie Jones, Kara Holden, & Mel Sullivan

Advance Organizer

Coaching, mentoring, & supervising



The role of deliberate practice



Assessment of coaching & supervision in your LEA

Do something bigger altogether

- 
- ✦ *What is coaching? And how does it differ from mentoring and supervising?*



The dictionary definition of coaching is to:

intransitive verb

- “train intensively”

transitive verb

- “instruct, direct, or prompt”

(Merriam-Webster’s Collegiate Dictionary, 11th edition, 2004)

VIDEO CLIP - EXAMPLE



✘ *What is the power of coaching done well?*

- ❑ **Traditional PD without coaching = 0.0 ES,** which means **NO IMPACT** (i.e., little to no transfer to real world practice).
- ❑ **With coaching = 1.42 ES,** which means **LARGE IMPACT** (i.e., high transfer to real world practice).

(See Joyce & Showers, 2002)

- ✦ Atul Gawande said it best in a 2011 article that appeared in *The New Yorker*.



- “No matter how well trained people are, few can sustain their best performance on their own. That’s where coaching comes in” (p.1). “Coaching *done well* may be the most effective intervention designed for human performance.” (p.9 as cited in Marzano & Simms, 2013)

- 
- Atul Gawande: The Difference Between Coaching and Teaching (49:00-54:00)

<http://www.youtube.com/watch?v=VabtGPV>
[VihA - t=2342](#)



x *What are the essential features of coaching?*

Institutionalizes a “culture of improvement.”



✦ **Adopts a coaching, rather than a teaching model.**



- ✦ **Provides expert eyes and ears.**



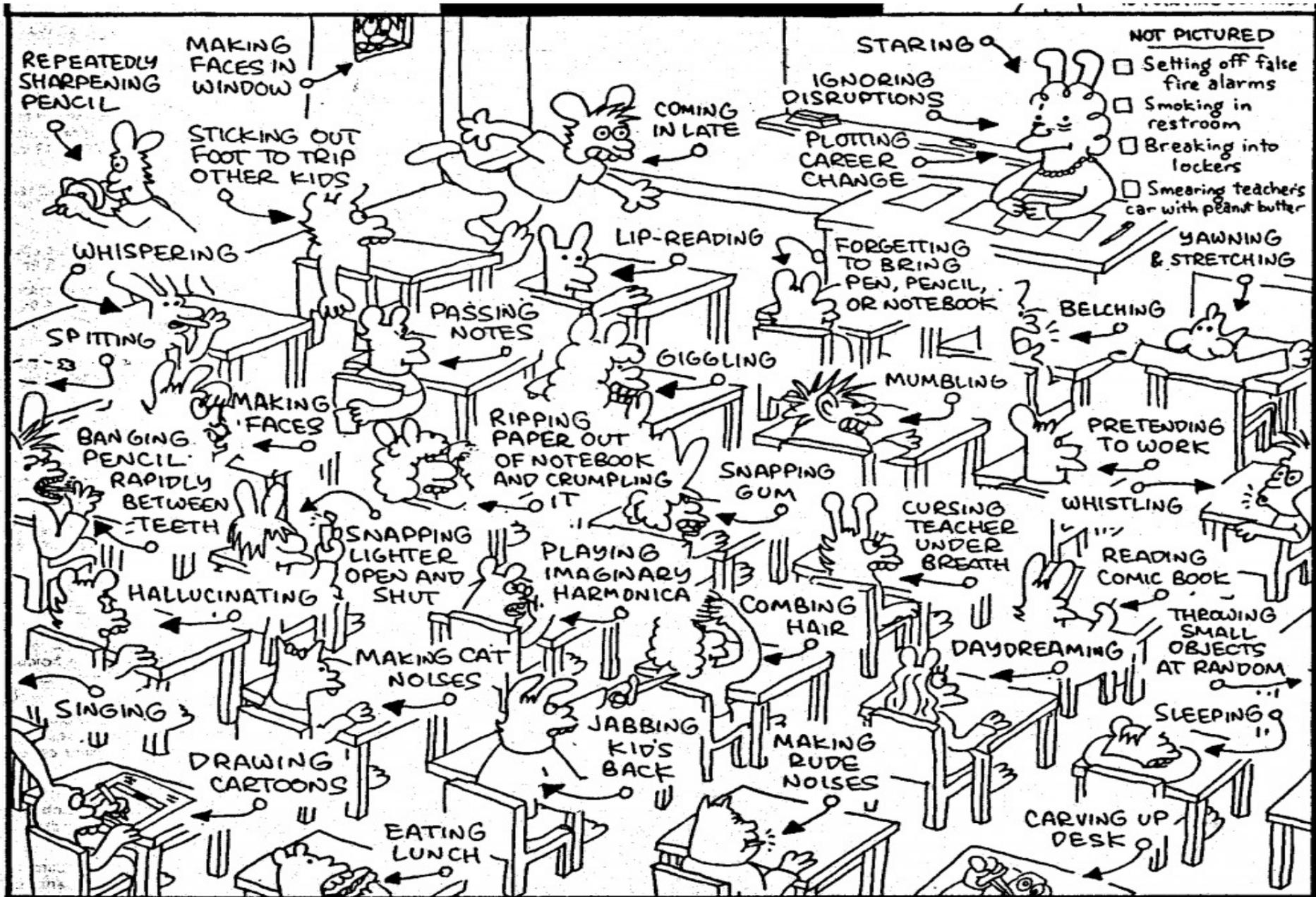
- ✦ **Accounts for conditions of complexity.**



✦ **Learning in a university classroom.**



* Teaching in a real world classroom.



- ✦ **Task analyzes components of effective instruction.**



✦ **Focuses on teaching and learning.**



- ✦ **Incorporates goal orientation.**



✦ **Uses data as a guide.**



- ✦ **Provides regular support and interaction.**



- ✦ **Embraces a semi-structured protocol.**



✦ **Fosters reflection.**



× Employs “pit crews”...



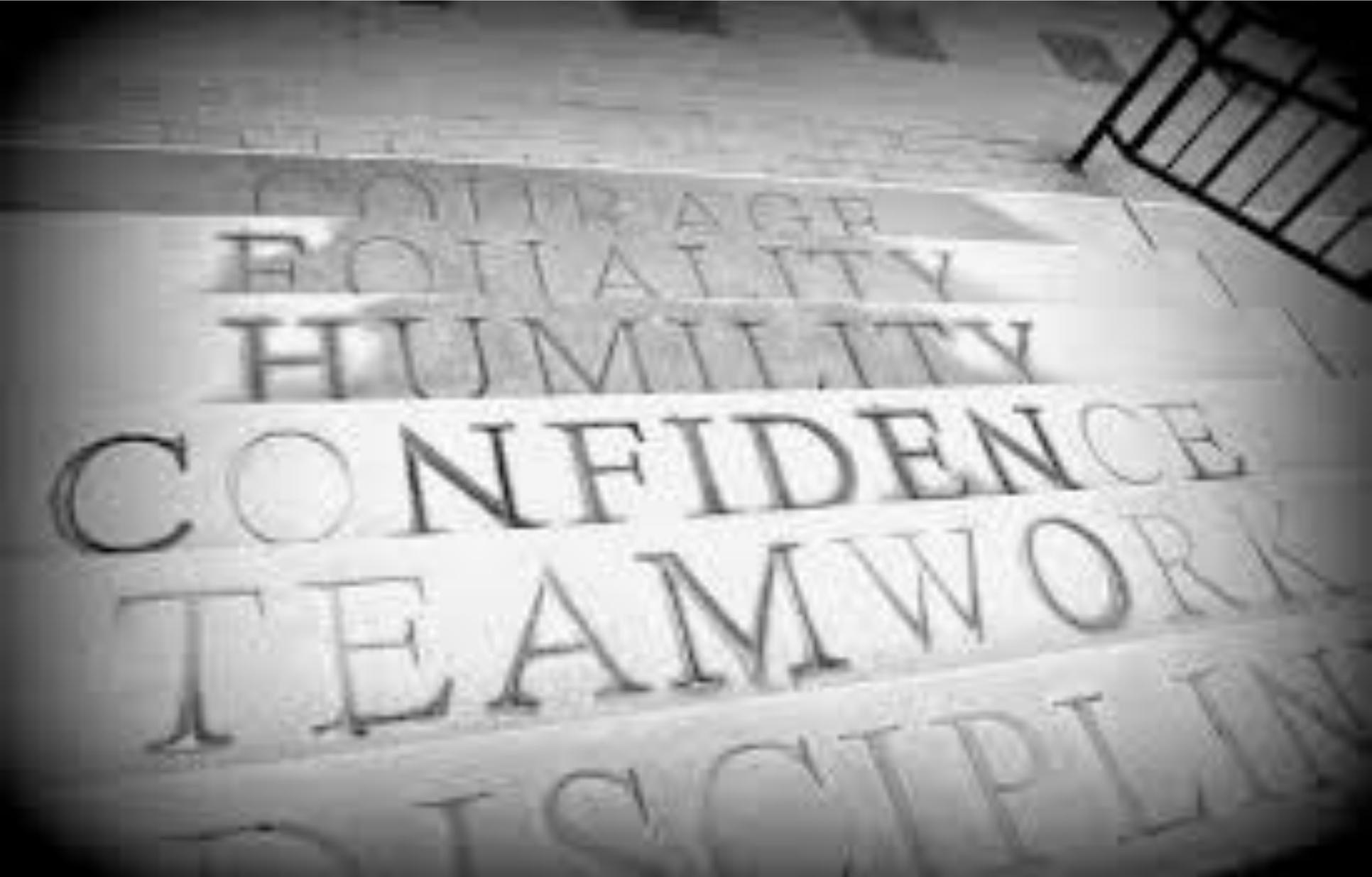
✘ Not “cowboys”.



- ✧ **Incorporates deliberate practice.**

“Practice isn’t the thing you do once you’re good. It’s the thing you do that makes you good.” - Malcolm Gladwell

- ✦ **Values humility, discipline, and teamwork.**



- ✘ **Provides a North Star.**



× **Aims to change lives!**





One essential feature of coaching that requires a closer look is the pulling apart and supporting practice.



Lampert (2010) reminded us that teaching is “made up of component practices” that can be learned by practicing (p.31).

Components of Deliberate Practice

Intentional

Strategic

Repetitious

Informative

Do something bigger altogether

(Ericsson, Krampe, & Tesch-Romer, 1993)

- 
- ***Intentional*** – **One must be motivated to attend to the task and exert effort to improve performance.**

(Ericsson, Krampe, & Tesch-Romer, 1993)

- *Strategic* - The design of the task should **take into account pre-existing knowledge** so that the task can be correctly understood after a brief period of instruction (i.e., *designed for skill level*).

(Ericsson, Krampe, & Tesch-Romer, 1993)

- ***Informative*** – Should provide **informative feedback** and knowledge of results of performance –in conjunction with immediate feedback from an expert or peer.

(Ericsson, Krampe, & Tesch-Romer, 1993)

- 
- ***Repetitious*** - Should repeatedly perform the same or similar tasks.

(Ericsson, Krampe, & Tesch-Romer, 1993)

- × **The Gladwell and Ericsson Challenge**
 - ▣ **The recently published Princeton study!**



Do something bigger altogether

Deliberate Practice and Performance in Music, Games, Sports, Education, and Professions

A Meta-Analysis

Brooke N. Macnamara¹

David Z. Hambrick²

Frederick L. Oswald³

¹Princeton University

²Michigan State University

³Rice University

Brooke N. Macnamara, Department of Psychology, Peretsman-Scully Hall, Princeton University, Princeton, NJ 08544 E-mail: bmacnama@princeton.edu

Author Contributions B. N. Macnamara and D. Z. Hambrick developed the study concept. All authors contributed to the study design. B. N. Macnamara performed effect-size data collection with input from D. Z. Hambrick. B. N. Macnamara performed the data analyses with input and guidance from F. L. Oswald. D. Z. Hambrick drafted the introduction, discussion, and conclusion sections of the manuscript. B. N. Macnamara drafted the method and results sections. All three authors provided critical revisions. All authors approved the final version of the manuscript for submission.



Abstract

More than 20 years ago, researchers proposed that individual differences in performance in such domains as music, sports, and games largely reflect individual differences in amount of *deliberate practice*, which was defined as engagement in structured activities created specifically to improve performance in a domain. This view is a frequent topic of popular-science writing—but is it supported by empirical evidence? To answer this question, we conducted a meta-analysis covering all major domains in which deliberate practice has been investigated. We found that deliberate practice explained 26% of the variance in performance for games, 21% for music, 18% for sports, 4% for education, and less than 1% for professions. We conclude that deliberate practice is important, but not as important as has been argued.

Do something bigger altogether

Table 1
**A Summary of a Meta-analysis of the Effects of Training and Coaching
 on Teachers' Implementation in the Classroom (Joyce & Showers, 2002)**

TRAINING COMPONENTS	OUTCOMES		
	(% of participants who demonstrate knowledge, demonstrate new skills in a training setting, and use new skills in the classroom)		
	Knowledge	Skill Demonstration	Use in the Classroom
Theory and Discussion	10%	5%	0%
+ Demonstration in Training	30%	20%	0%
+ Practice & Feedback in Training	60%	60%	5%
+ Coaching in Classroom	95%	95%	95%



“There is no doubt that deliberate practice is important, from both a statistical and a theoretical perspective. It is just less important than has been argued. For scientists, the important question now is, what else matters?” -Macnamara, lead study author

- × **Effective Coach = Knowledge + Skill + Will.**



Do something bigger altogether

× **Knowledge & Expertise**

- ▣ Curriculum, content, and pedagogy
- ▣ Motivation and adult learning
- ▣ School culture and dynamics

(Adapted from Hudson, 2010; Hudson, Skamp, & Brooks, 2005; Sempowicz & Hudson, 2011; Rock, Schoenfeld, Zigmond, Gable, Gregg, Ploessl, & Salter, 2013)

× **Interpersonal Skill**

- Communicating and resolving conflict
- Prioritizing and negotiating
- Problem solving and decision making

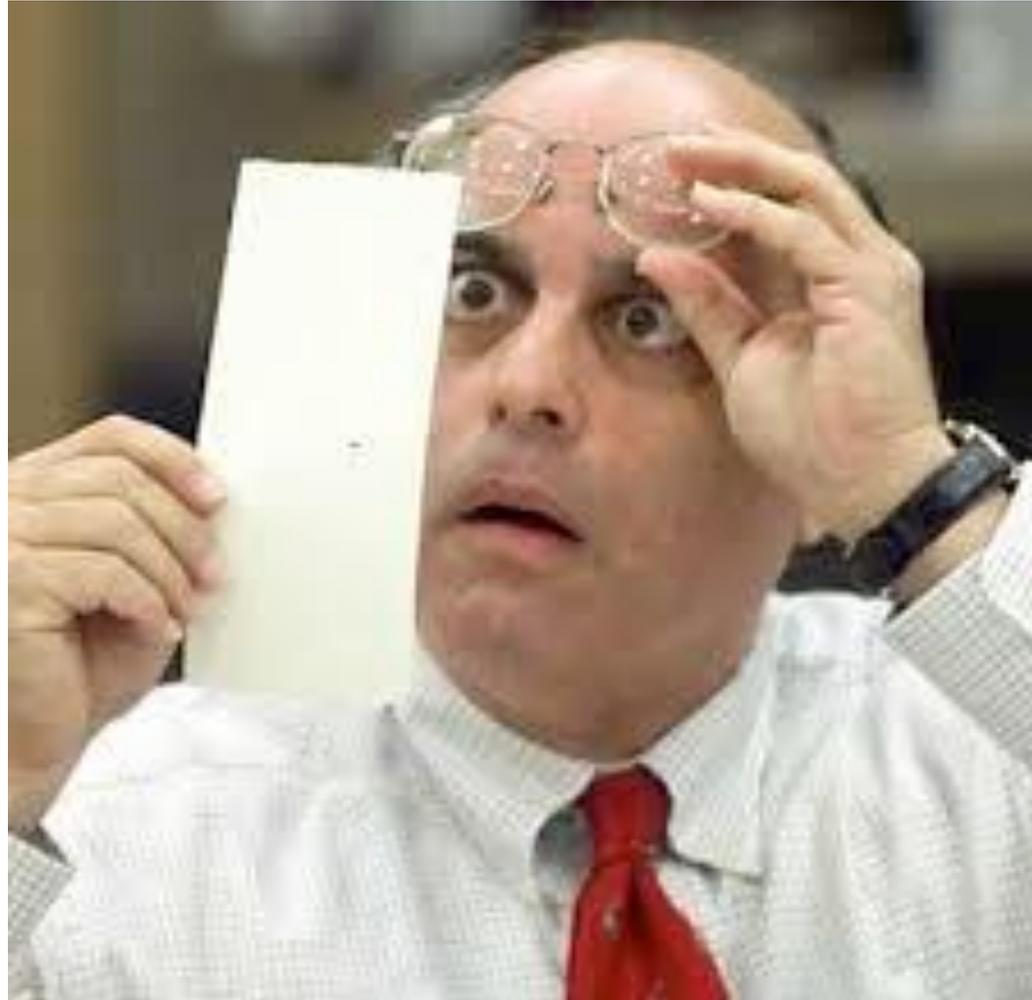
(Adapted from Hudson, 2010; Hudson, Skamp, & Brooks, 2005; Sempowicz & Hudson, 2011; Rock, Schoenfeld, Zigmond, Gable, Gregg, Ploessl, & Salter, 2013)

✦ **Technical Skill**

- ▣ Planning and assessing
- ▣ Observing and collecting data
- ▣ Providing immediate and delayed feedback
- ▣ Using 1:1 coaching, group coaching, and peer observation of best practice

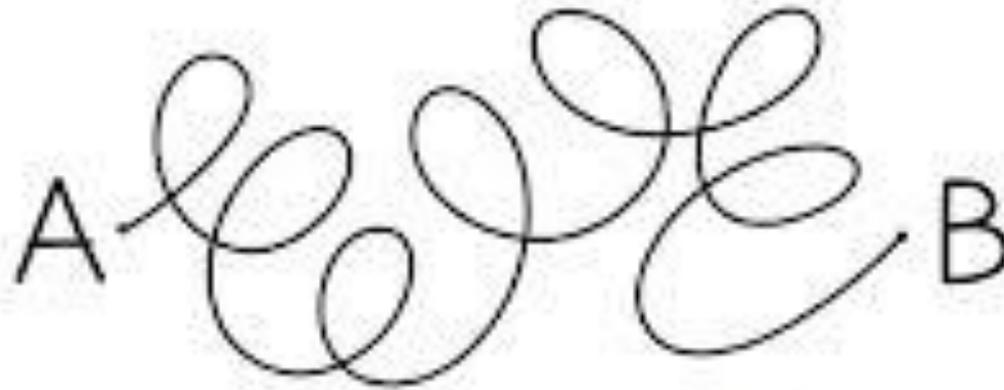
(Adapted from Hudson, 2010; Hudson, Skamp, & Brooks, 2005; Sempowicz & Hudson, 2011; Rock, Schoenfeld, Zigmund, Gable, Gregg, Ploessl, & Salter, 2013)

- ✦ **Let's take a look at coaching and supervising in your LEA.**



Do something bigger altogether

■ Current vs. Desired Practices and Outcomes



Do something bigger altogether

Values + Theory + Science = Successful Transformation and Change



Do something bigger altogether

- × **Values** influence selected **outcomes**.
- ▣ *What are key stakeholders beliefs about coaching and supervision?*
- ▣ *What do key stakeholders value about coaching?*
- ▣ *What is the energy level?* (Rush and Shelden, 2011)

- × **Theory of Change** influences selected **practices**.
- *What theory of change guides your transformation to coaching?*
 - Situated Learning (SL) (Langer, 2009; Lave & Wenger, 1991).
- *Have you developed an ELM (i.e., education logic model)?*
- <http://relpacific.mcrel.org/ELM.html>

Goal: Improved short- and long-term mathematical outcomes for students with disabilities in North Carolina.

INPUTS

OUTPUTS

OUTCOMES

Evidence-Based Practice

Broad Pedagogical Practice:
High access practices and positive reinforcement

Subject-Specific Practices:
Models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, cumulative review, focus on structures, visual representations, motivations strategies, computational fluency

Programs: Number Worlds, TransMath, Connecting Math Concepts, Equals, ALEKS, etc.

Mathematical Content Knowledge for Teaching

Implementation Stages Analysis Tool, Time-sampling of student engagement, frequency count of teacher practices, MQI, Fidelity checks, LMT

Activities

Book Study
Coaching Modules
Coaching (Instructional, Content, Technical)
Coaching of Coaches
Program Training

Foundations of Mathematics Booster Sessions

Coaching evaluation survey, book study activities, coaching logs (frequency/duration), Foundations of Math Observations

Participants

Math Consultants
NC SIP Coordinators
Administrators
IHEs
LEA Coaches
Teachers

Participants with low LMT exit scores

Short-Term (one to three years)

Increased use of Evidence-Based Practices
Increased Student Engagement
Increased Fidelity of Program Implementation
Teacher Satisfaction
Coach Satisfaction
Principal Satisfaction
Parent Satisfaction
Teacher Retention

Increased Mathematical Content Knowledge for Teaching

Implementation Stages Analysis Tool, Time-sampling of student engagement, frequency counts of teacher practices, MQI, fidelity checks, LMT, surveys, teacher retention data

Long-Term (three to five years)

Increased Student Achievement
Sustaining Practices
Replication
Sustained Teacher Acceptability
Teacher Satisfaction
Coach Satisfaction
Principal Satisfaction
Parent Satisfaction
Teacher Retention

Implementation Stages Evaluation Tool, DR, Expenditure Form, NKT, CBM, EOG, ODRs, student attendance, surveys, teacher retention data

Do something bigger altogether

× **Implementation Science** influences **stages** of adoption and adaptation.

- NIRN - The Active Implementation Hub
 - Modules
 - Lessons
- <http://implementation.fpg.unc.edu/modules-and-lessons>
- Lesson 5: Coaching System Development
- https://unc-fpg-cdi.adobeconnect.com/_a992899727/ai-lesson5/



Do something bigger altogether

Thank you for your time. 
mlrock@uncg.edu