

Learning Targets



1. Know the background and development of mastery learning.
2. Explore the essential elements of mastery learning and how these can be applied in modern classrooms.
3. Develop guidelines for implementing mastery learning strategies in different classes at all grade levels.

RG

Essential Understandings for



RG

Systemic Change

- * A highly complex process
- * Professional development is essential



RG




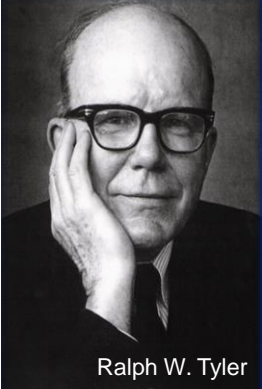
Change is a prerequisite for improvement!!

RG

Standards-Based Learning

Four Crucial Understandings







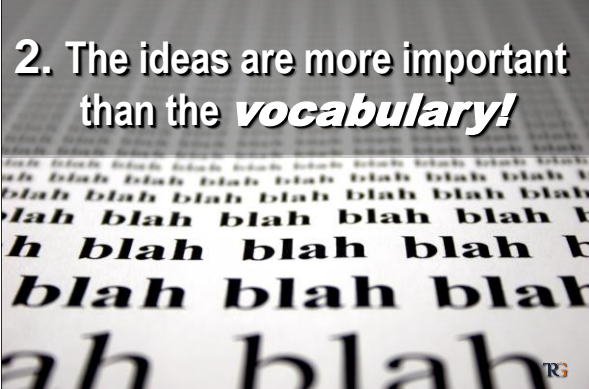
Ralph W. Tyler

These ideas are **not new!**

- ✓ *Basic Principles of Curriculum and Instruction* (1949)
- ✓ Two Fundamental Decisions:
 - A. What do I want students to learn?
 - B. What evidence would I accept to verify their learning?

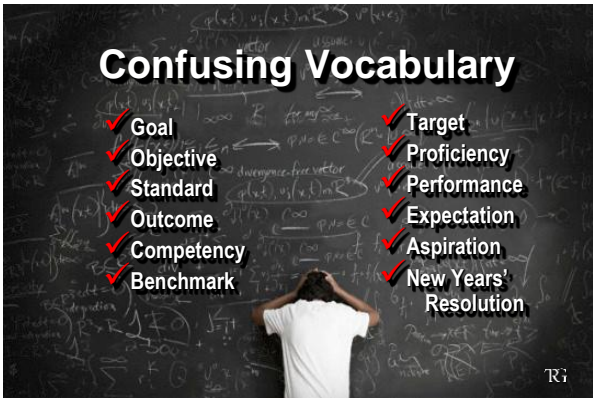


2. The ideas are more important than the **vocabulary!**



Confusing Vocabulary

- ✓ Goal
- ✓ Objective
- ✓ Standard
- ✓ Outcome
- ✓ Competency
- ✓ Benchmark
- ✓ Target
- ✓ Proficiency
- ✓ Performance
- ✓ Expectation
- ✓ Aspiration
- ✓ New Years' Resolution



3. Good ideas can be implemented poorly!

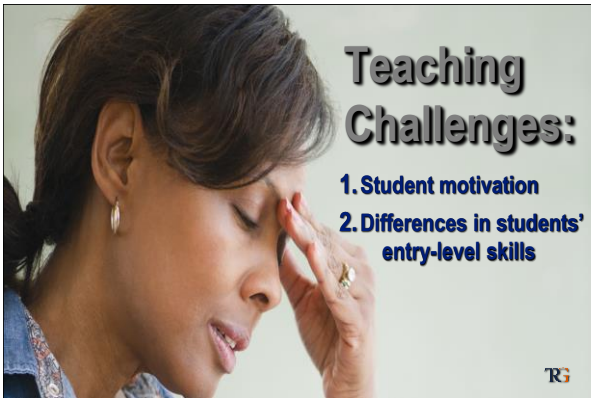
- ✓ How will it translate to practice?
- ✓ How will we know it works?

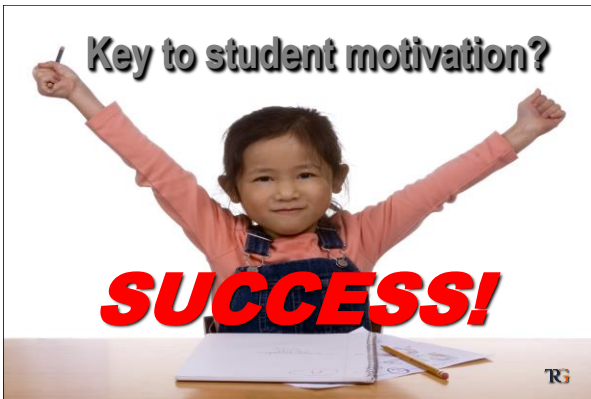


4. Success in education hinges on what happens at the classroom level!











Differences in students' entry-level skills

- ✓ Teachers often lack the *time*, *support*, and *strategies* to assist all learners.
- ✓ Individualized programs are often *impractical* in group-based classrooms.

RG



Problems with individualized programs:

- ✓ Difficult to manage
- ✓ Require students to learn from materials or technology
- ✓ Based on a single learning sequence (progression) for all students
- ✓ Expect students to manage their own learning rate
- ✓ Did not fit with curriculum demands

RG

Needed:

A practical strategy to help **ALL** students succeed!

RG



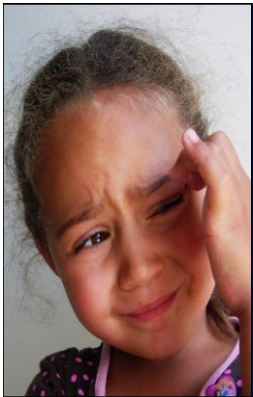
Solution:
MASTERY LEARNING
 A practical strategy to help **ALL** students **SUCCEED!**

TRG

MASTERY LEARNING
An Overview

1. How was Mastery Learning developed?
2. What are the essential elements of Mastery Learning?
3. How are common concerns addressed?

TRG



How would you define
Aptitude for learning?

TRG

Traditional View:

Aptitude:

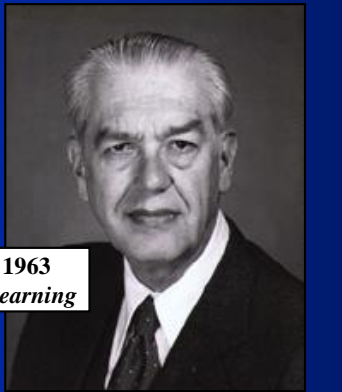
Level to which a student can learn a particular subject.

Good learners
& **Poor** learners!



TR

John B. Carroll - 1963
A Model of School Learning



TR

Carroll's Alternative View:

Aptitude:

Time required by a student to learn to a particular level.

Fast learners
& **Slow** learners!



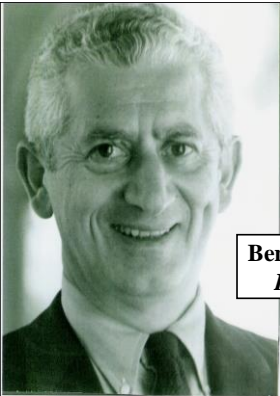
TR

John B. Carroll - 1963 *A Model of School Learning*

Alternative view of *Student Aptitude*

$$\text{Learning} = \frac{\text{Time Spent}}{\text{Time Needed}} = \begin{matrix} \bullet \text{ Perseverance} \\ \bullet \text{ Opportunity to Learn} \\ \bullet \text{ Learning Rate} \\ \bullet \text{ Quality of Instruction} \\ \bullet \text{ Ability to Understand} \end{matrix}$$

TR



Benjamin S. Bloom - 1968
Learning for Mastery

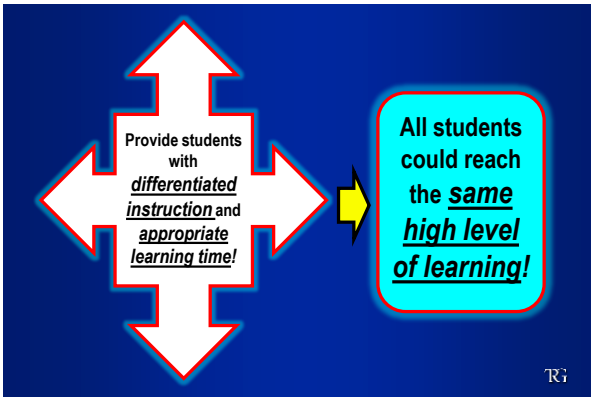
TR

Bloom's idea:

All students receive the same instruction and the same learning time.



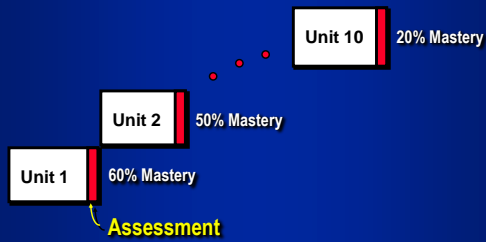
TR





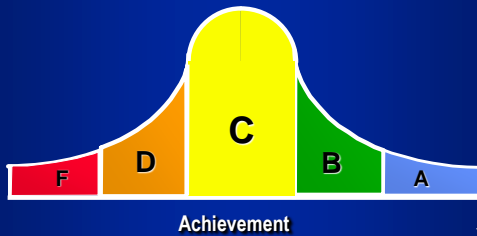


Instructional Process in Traditional Classrooms



TRG

Distribution of Achievement in Traditional Classrooms



TRG

How can we alter this to improve learning?

1. One-to-one tutoring
2. Learning strategies of successful students

TRG

Bloom's Primary Assertion:

Assessments must become an **integral part** of instruction.



- ✓ Classroom assessments should be **learning tools**,
- ✓ Not **evaluation devices** that mark the end of learning.

TRG

Assessments provide “Feedback”



1. What students are expected to learn?
2. What have they learned well?
3. What do they need to learn better?
4. What steps will lead to improvement in learning and teaching?


TRG

Implication #1

Assessments must be **sources of information** for students *and* teachers.



TRG




Implication #2
Assessments must be followed by **high quality corrective instruction.**

RG

Implication #3
Students must be given a **second chance** to show improvement!



RG

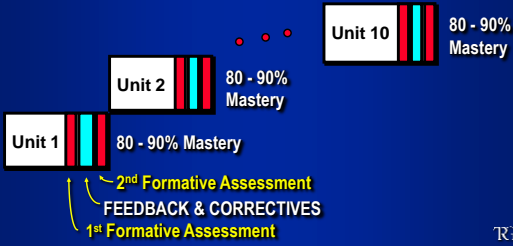


“Spectacular achievements are *always* preceded by unspectacular preparation.”

Roger Staubach

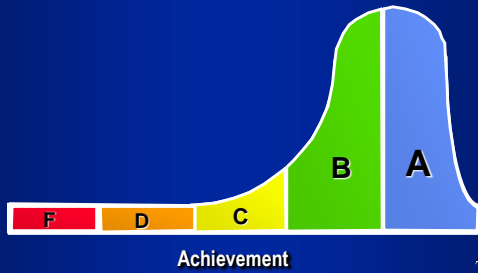
RG

Instructional Process in MASTERY LEARNING Classrooms



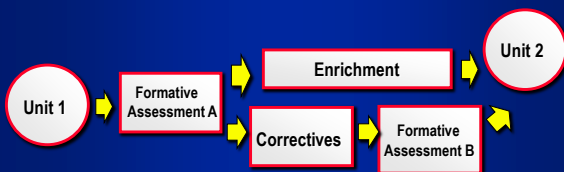
RG

Distribution of Achievement in Mastery Learning Classrooms



RG

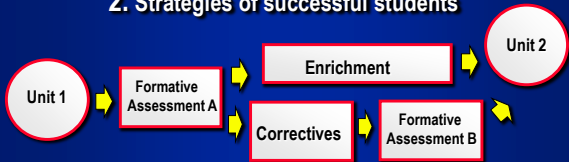
Mastery Learning



RG

Sources of MASTERY LEARNING

1. One-to-one tutoring
2. Strategies of successful students



TRG

How do I use Mastery Learning in my classes?

Questions / Concerns

- ✓ Time vs. Coverage?
- ✓ Motivation?
- ✓ After the 2nd Assessment?
- ✓ Grading?



TRG

Essential Question:

Is your purpose as an educator to **select** talent, or to **develop** talent?



TRG

Essential Elements of
MASTERY LEARNING

1. Feedback, Correctives, and Enrichment
2. Congruence / Alignment

TRG

Essential Element #1

**Feedback,
Correctives, and
Enrichment**

TRG



Feedback
must be:

- ✓ Regular
- ✓ Specific

TRG

Correctives *must* include:

- ✓ Different presentation
- ✓ Different engagement



TR



Correctives include:

- ✓ Different learning styles
- ✓ Different learning modalities
- ✓ Different types of intelligence
- ✓ **Not** repetition of the initial instruction!

TR

TR

Corrective Activities

Activity	With the Teacher	With a Friend	By Oneself
Reteaching	✗		
Individual Tutoring	✗	✗	
Peer Tutoring		✗	
Cooperative Teams		✗	
Course Texts	✗	✗	✗
Alternative Texts	✗	✗	✗
Alternative Materials	✗	✗	✗
Academic Games	✗	✗	✗
Learning Kits		✗	✗
Learning Centers		✗	✗
Computer Activities		✗	✗

Enrichment *must* be:

- ✓ Rewarding
- ✓ Challenging
 - A valuable learning experience
 - Not necessarily tied to unit content



TRG

Enrichment Activities

Activity	With a Friend	By Oneself
Peer Tutoring	✗	
Cooperative Teams	✗	
Developing Practice Exercises	✗	✗
Special Projects or Reports	✗	✗
Games, Problems, or Contests	✗	✗
Advanced Computer Activities	✗	✗
Activities for Gifted Students	✗	✗

TRG

Example of Enrichments

Find the numeral that each letter represents in the following problem:

$$\begin{array}{r}
 \text{DONALD} \\
 + \text{GERALD} \\
 \hline
 \text{ROBERT}
 \end{array}$$

Hint: D = 5

TRG

Example of Enrichments

Find the numeral that each letter represents in the following problem:

$$\begin{array}{r} \text{SAVE} \\ + \text{MORE} \\ \hline \text{MONEY} \end{array} \quad \text{Hint: None!}$$

RG

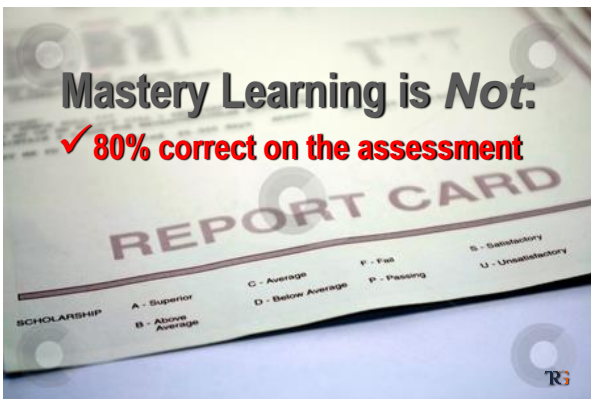
Mastery Learning is *Not*:

Teach ➡ Assess ➡ Re-teach ➡ Re-assess



Mastery Learning is *Not*:

✓ 80% correct on the assessment

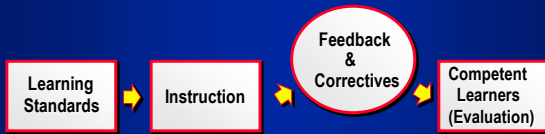


Essential Element #2

Congruence or Alignment

RG

Congruence / Alignment



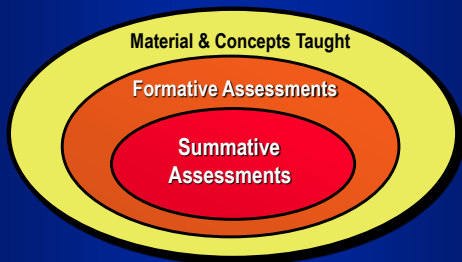
RG

Mastery Learning is **Not** :

✓ Teaching
to the
Test !

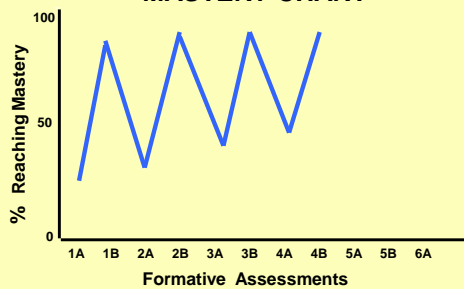
RG

Formative and Summative Assessments



RG

MASTERY CHART



RG

Essential Elements of *Mastery Learning* Show:

✓ Implementation is **broad** and **flexible**.



RG

Common concerns regarding
MASTERY LEARNING

1. Mastery Learning and grading standards?
2. The fairness of a second chance?
3. Mastery Learning's relation to real life?
4. Motivation and the second chance?

TRG


Questions to Consider


1. What was most valuable and useful?
2. What questions or concerns remain?
3. What should be the next steps?

TRG


For help or additional information:

Thomas R. Guskey
College of Education
University of Kentucky
Lexington, KY 40506

 guskey@uky.edu

 859-221-0077

 @tguskey

 859-221-0077

TRG
