Using Mastery Learning to Help All Students Achieve

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The practice and the need it addresses	Evidence this practice benefits UNLV Students	Resources and where to find them	How other UNLV teachers might adopt this practice

What is Mastery Learning?

- In 1968, Benjamin Bloom outlined a specific strategy that he dubbed *learning for mastery*, which later became *mastery learning* (Guskey, 2007).
- Mastery learning includes the following elements:
  - Instruction organized into units.
  - Clear instructional goals.
  - Minimum passing criteria.
  - Use of regular formative assessment to evaluate student learning on instructional goals.
  - "Corrective" (p. 12) activities paired with formative assessments to address individual struggles.
  - Use of parallel assessments to corroborate the first formative assessment and provide students with multiple attempts.
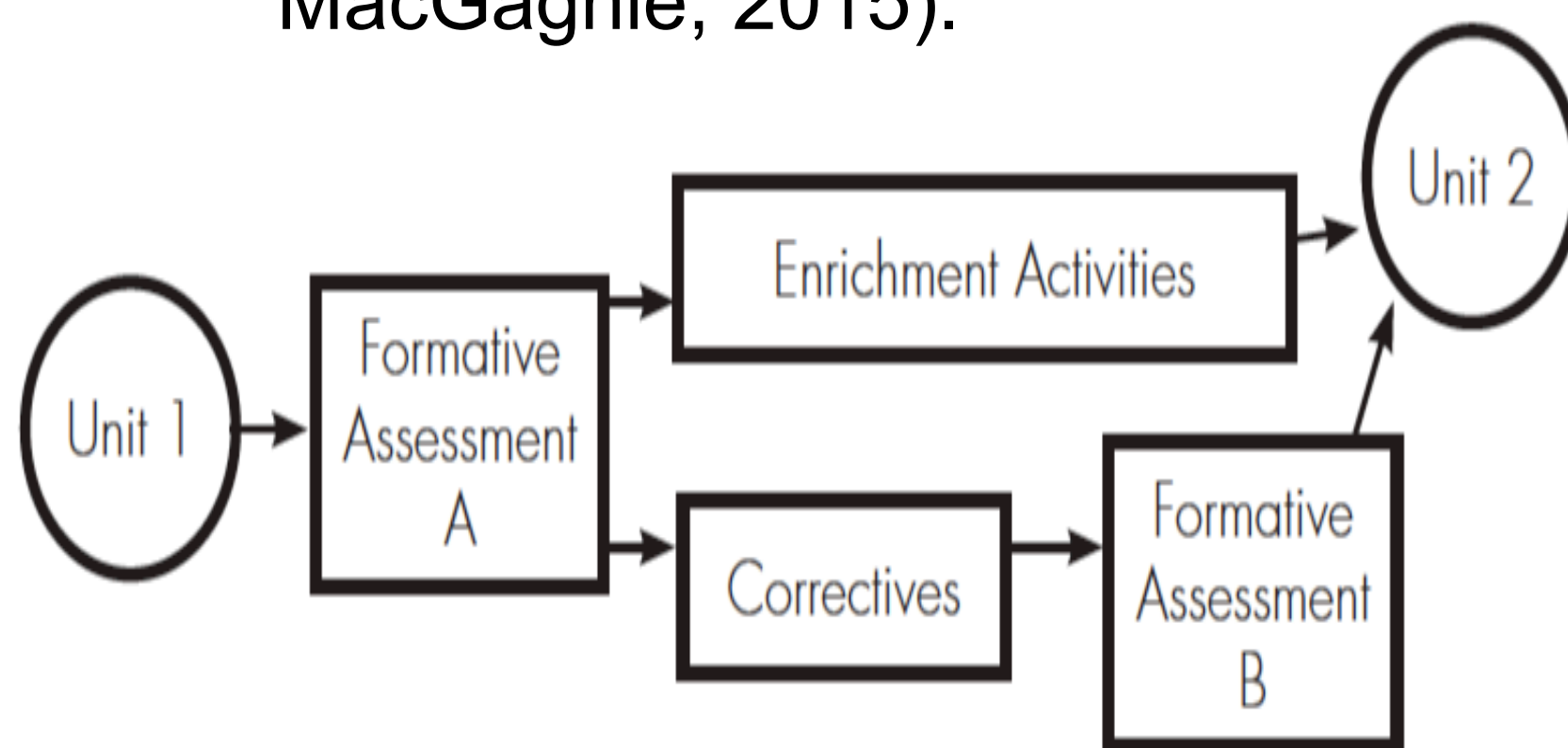 - Enrichment activities to push high achieving students (Guskey, 2007; MacGaghie, 2015).

Figure 1. Components of Bloom's (1968) mastery learning. Reprinted from "Closing Achievement Gaps: Revisiting Benjamin S. Bloom's 'Learning for Mastery'" by T. R. Guskey, 2007, *Journal of Advanced Academics, 19*(1), p. 14.

What the Research Says

- In classes that implement mastery learning, 90% of students achieve at the level that was previously attained by only the top 10% of the class (Kulik, Kulik, & Bangert-Drowns, 1990).
- "[L]ow aptitude students may gain more" (Kulik et al., 1990, p. 286) from a course that uses mastery learning.
- It may be particularly effective in achieving higher-level thinking goals (Guskey, 2007).
- Mastery learning reduces variation in student learning and closes achievement gaps (Guskey, 2007).
- Mastery learning may also boost students' confidence in learning situations, attendance rates, involvement in class activities, and attitudes toward learning (Guskey, 2007).

What UNLV Students Say

- "Dr. Beck allowed the students to redo assignments based on her corrections and feedback…I greatly benefitted from this. It also took the pressure of[f] scholastic performance and allowed the students to fully concentrate on the assignment. I learned more by redoing an assignment I did not fully understand. Afterwards this gave me a feeling of mastery and self-confidence."

Additional Resources

- See handout for resources on differentiation, backward planning, and mastery learning including example syllabus language.

An Example

Learning to use APA format in a master's level education program is crucial to student success in the M.Ed. program. Using mastery learning allows our students to incorporate APA skills in a scaffolded (gradual) manner to fully grasp the concept:

- Students participate in an APA tutorial online.
- Students take a baseline quiz and have unlimited attempts until they reach 100%.
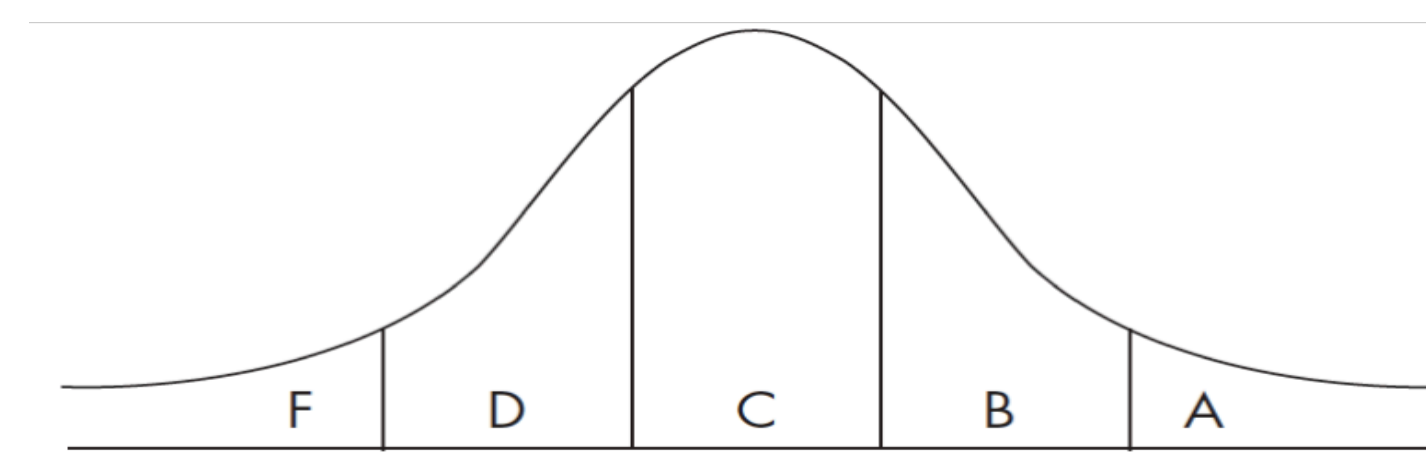- Students complete an APA correction activity to apply their knowledge.

Figure 2. Distribution of scores in a class with regular instruction. Reprinted from "Closing Achievement Gaps: Revisiting Benjamin S. Bloom's 'Learning for Mastery'" by T. R. Guskey, 2007, *Journal of Advanced Academics, 19*(1), p. 11.

Why Mastery Learning?

- It can be easily implemented across content areas. We recommend homing in on a key skill in your content area and allowing students multiple opportunities for success.
- It is possible to work into any course and syllabus and may require minimal adjustments (Guskey, 2007). See the example language in our handout.
- The instructor can determine how much time to allocate to mastery learning— just a little or more extensive implementation.
- It allows students to attempt knowledge or skill multiple times (Guskey, 2007).
- It meets the needs of diverse learners (Guskey, 2007).
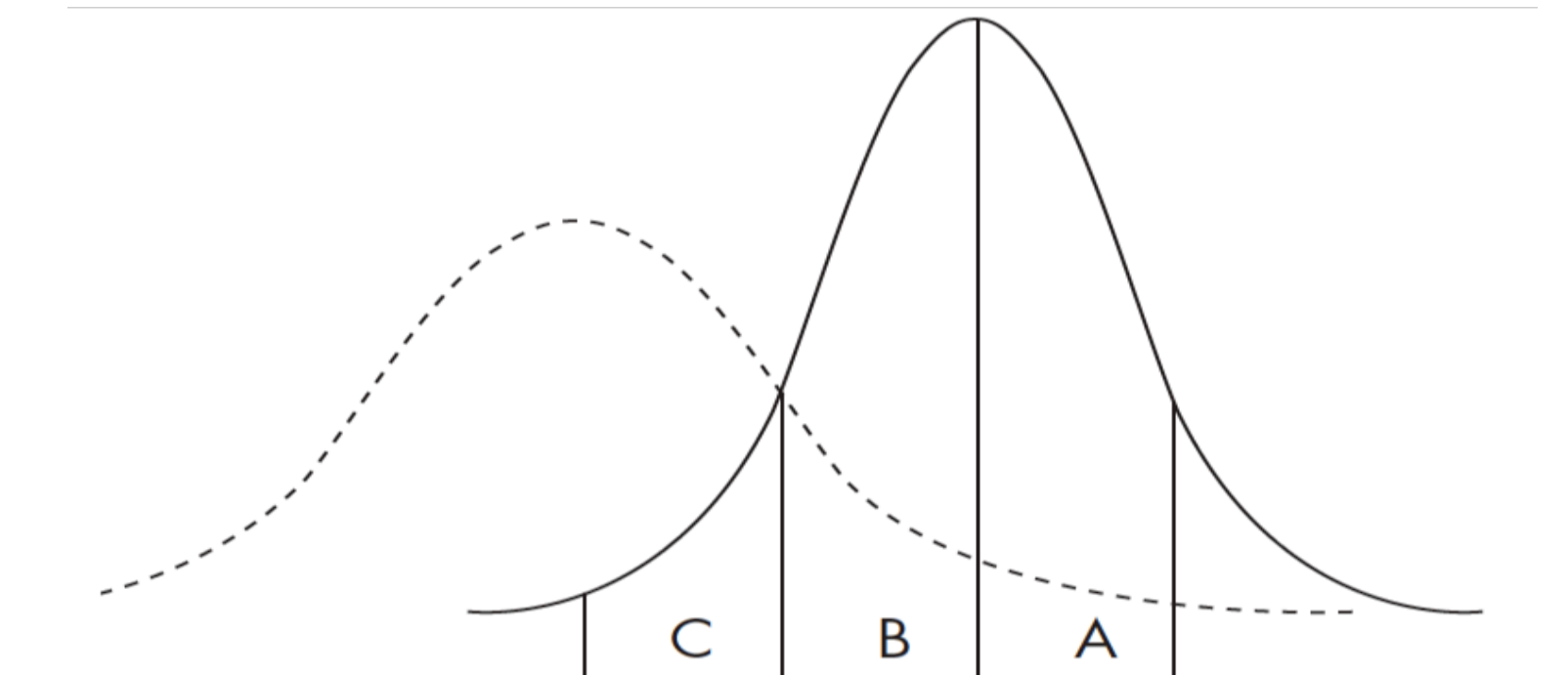- It reduces variation in learning and closes achievement gaps (Guskey, 2007).

Figure 3. Distribution of scores in a class with mastery learning. Reprinted from "Closing Achievement Gaps: Revisiting Benjamin S. Bloom's 'Learning for Mastery'" by T. R. Guskey, 2007, *Journal of Advanced Academics, 19*(1), p. 14.

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