CORE FUNCTION	EFFECTIVE PRACTICE	INDICATOR
Classroom Instruction	Expect and monitor sound instruction in a variety of modes	**All teachers review with drilling/class recitation. (127)**

Explanation: Research confirms that best instructional practices include a quick review of content and skills from the previous day's lesson. Teachers devote approximately 20% of each class period to reviewing the previous lesson using quick questioning techniques to determine which students need additional reinforcement and supports. Teachers offer timely, corrective feedback to minimize the risk of students assimilating inaccurate information and/or incorrect skills. Teachers adjust future lesson plans to accommodate reteaching and provide additional opportunities to master content and skills through drill and recitation.

Questions: What evidence will the Leadership Team use to determine that teachers spend 20% of each class period in review of each previously taught lesson? Do teachers review previously taught lessons using a quick drill and/or class recitation to assess student mastery? Do teachers employ quick, daily assessment strategies, like drill and recitation, to determine which students need what additional, instructional supports to master the content/skills taught? Do teachers use corrective feedback in an effort to detect and remedy students' content and skill deficits?

Evidence Review:

At least three powerful methods of instruction can readily accommodate reteaching: direct instruction/explicit teaching, mastery learning, and reciprocal teaching (Cawelti, 2004; Marzano, Pickering, & Pollock, 2001; Hattie, 2012; Walberg, 2006). Direct instruction can be viewed as traditional or conventional whole-group teaching done well. Since teaching changed very little in the 20th century and may not change substantially in the near future, it is worthwhile knowing how the usual practice can excel. Since it has evolved from ordinary practice, direct teaching is relatively easy to carry out, does not disrupt conventional expectations, and can incorporate teaching various subcomponents such as asking questions. Scholars do not completely agree on the definition of direct instruction. They may refer to it as explicit, process-product, direct, active, or effective teaching. The earliest reviews emphasized observed traits of teachers including clarity, task orientation, enthusiasm, and flexibility, as well as their tendencies to structure their presentations and occasionally use student ideas. The early summaries of research emphasized systematic sequencing of lessons, including the use of review, the presentation of new content and skills, guided student practice, the use of feedback and correctives, and independent student practice.

Based on later observational and control-group research, reviewers identified six phased functions of explicit teaching: (1) daily homework check, review, and, if necessary, reteaching; (2) rapid presentation of new content and skills in small steps; (3) guided student practice with close monitoring by teachers; (4) corrective feedback and instructional reinforcement; (5) independent practice in seatwork and homework with high (more than 90%) success rate; and (6) weekly and monthly review (Brophy, 1999; Subotnik & Walberg, 2006).

Following the same evolution of research, reviewers identified the essential elements of "Mastery Learning." Originally conceived by Benjamin Bloom, Mastery Learning combines suitable amounts of time for individual students and behavioral elements of teaching (Walberg, 2006):

- "Cues" show students what is to be learned and explain how to learn it. Cues are more effective with increased clarity, salience, and meaningfulness of explanations and directions provided by teachers, instructional materials, or both. As the learners gain confidence, in ideal circumstances, the salience and numbers of cues can be reduced.
- "Engagement" is the extent to which learners actively and persistently participate until appropriate responses are firmly entrenched in their repertoires. Such participation can be indexed by the extent to which the teacher engages students in overt activity – indicated by absence of irrelevant behavior, concentration on tasks, enthusiastic contributions to group discussion, and lengthy study.
- "Corrective feedback" remedies errors in oral or written responses. In ideal circumstances, students waste little time on incorrect responses, and teachers rapidly detect and remedy difficulties by reteaching or using alternate methods. When necessary, teachers provide additional time for practice.
- "Reinforcement" is illustrated in the efforts elicited by athletics, games, and other cooperative and competitive activities. Immediate and direct reinforcement make some activities intrinsically rewarding. As emphasized by some theorists, classroom reinforcement may gain efficacy mainly by a rewarding sense of accomplishment or providing knowledge of results.

Source: Herb Walberg, *Handbook on Restructuring and Substantial School Improvement*.

Evidence Review:

Review (20% of period)

The teacher begins a whole-class instructional segment by setting the climate for attentive

learning, cueing the students to focus in, reinforcing attentive behaviors, reminding students to have their necessary materials at hand, checking postures and facial expressions, and generally encouraging pro-social behavior. This is called a "behavior check." Next the teacher quickly reviews the previous lesson, including homework assignments from it. The teacher uses rapid-fire questioning to review the previous

lesson and build a bridge from it to the new lesson. The teacher notes the students' progress in mastering new learning and encourages their self-praise. The teacher checks for areas that need reteaching.

What Marzano (2012) recommends a teacher typically do is to engage students in a brief review of content that highlights the critical information. The teacher uses specific strategies to review information: summary, problem(s) that must be solved using previous information, question(s) that require a review of content, demonstration, and brief practice test(s) or exercise(s). When necessary, the teacher reteaches basic information or skills. Evidence that students grasp the previous content includes, when asked, being able to describe the previous content on which the new lesson is based, and responding to class activities in a way that indicates that they recall the previous content.

Hattie finds, "Teachers need to be aware of what each and every student in their class is thinking and what they know, be able to construct meaning and meaningful learning experiences in light of this knowledge of the students, and have proficient knowledge and understanding of their subject content so that they can provide meaningful and appropriate feedback such that each student moves progressively through the curriculum levels" (Hattie, 2012, p. 18).

Review (and Homework Check)

Time: 5 – 8 minutes

Purposes: To provide students with clear evaluations of their progress in attaining learning goals (Marzano, 2003). To detect areas that need further teaching or practice. To connect prior learning with new learning

Method: May include homework check. To review: Teacher asks fairly rapid-fire questions from previous lesson to build a bridge to today's new learning. Teacher calls on students in rotation, using various methods. Teacher sprinkles in verbal reinforcement about the progress and understanding students are demonstrating. This is followed with a "rope" (anything to lasso or draw in the students' attention).The "rope" signals the transition to the *Think* segment, where the new lesson is introduced.

Source: Sam Redding, *The Mega System. Deciding. Learning. Connecting. A Handbook for Continuous Improvement Within a Community of the School.*

REFERENCES AND RESOURCES

Brophy, J. (1999). *Teaching.* United Nations Educational, Scientific, and Cultural Organization. http://www.ibe.unesco.org/publications/practices.htm

Cawelti, G. (Ed.). (2004). *Handbook of research on improving student achievement*. Educational Research Service.

Hattie, J. A. C. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.

Marzano, R. J. (2003). *What works in schools: Translating research into action*. Association for Supervision and Curriculum Development.

Marzano, R. J. (2012). *Becoming a reflective teacher*. Marzano Research Laboratory.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Association for Supervision and Curriculum Development.

Redding, S. (2006). *The Mega System. Deciding. Learning. Connecting. A handbook for continuous improvement within a community of the school*. Academic Development Institute.

Subotnik, R. F., & Walberg, H. J. (2006). *The scientific basis of educational productivity*. Information Age Publishing.

Walberg, H. J. (2006). *Improving educational productivity: An assessment of extant research*. In R. F. Subotnik & H. J. Walberg (Eds.), *The scientific basis of educational productivity* (pp. 103–160). Information Age Publishing.

Walberg, H. (2007). *Handbook on restructuring and substantial school improvement*. Information Age Publishers.