

Research-Based Effective Teaching Principles

The use of research-validated instructional methods is one of the most powerful tools you, as a Pennsylvania teacher, have to target the specific needs of individual students. Effective instruction encompasses more than your lesson plans – it defines the arrangement of your classroom, how you allocate instructional time, the supplemental resources you select, how you determine whether your students are learning, and the way you communicate with your students' families. The following list of effective teaching principles provides some basic guidelines.

- Students learn more when they are actively engaged in instructional tasks.

When students are engaged, they are active participants in the learning process. Increased opportunities for all students to actively respond during instruction can result in higher academic achievement. This can be accomplished by using frequent questioning techniques such as choral responding or response cards with corrective feedback.

- High success rates correlate positively with student learning outcomes.

Providing sufficient time and appropriate instruction (which is direct, errorless, and matched to student's level of achievement) will enable your students to master any subject.

- The more content covered, the greater the potential for student learning.

When planning your lessons, consider how you will allocate time to effectively

cover content. Allocate time for instruction as well as time for group work and independent practice.

- Students achieve more in classes where they spend most of their time being directly taught by a teacher.

Direct instruction between teacher and students allows the teacher to build instructional relationships with the students. Allowing for the maximum amount of instructional time possible will help you to understand your students' learning styles and be more equipped to modify the lesson to meet the needs of each student.

- Students become independent, self-regulated learners through instruction that is deliberately and carefully scaffolded.

Provide support and structure to students, then systematically remove guidance and increase student competence.

- The critical forms of knowledge (declarative, procedural, and conditional) must be addressed in order for instruction to be effective.

Make sure that your lessons include:

- ▶ *Declarative - factual information*
- ▶ *Procedural - how to use the knowledge in specific ways*
- ▶ *Conditional - knowing when and where to apply the knowledge*

- Learning is increased when teaching is presented in a manner that helps students to organize, store, and retrieve information.

Instruct students in the use of specific strategies to help them make sense of complex information and to use information in new ways. Examples of strategies include the use of advance organizers to activate prior knowledge and set the stage for learning new content, graphic organizers, semantic maps, and brainstorming.

- Strategic instruction helps students to become critical thinkers.

Teach students how to apply techniques, principles, or rules in order to solve problems and complete tasks successfully and independently.

- Teachers can increase their students' achievement through instruction that is explicit.

Carefully design activities and materials that provide structure and supports to enable all students to understand and use new information and concepts.

Ensure teaching to mastery by:

- ▶ *providing students with examples and nonexamples to illustrate a concept or strategy;*
- ▶ *utilizing multi-sensory techniques;*
- ▶ *modeling proficient performance expectations and thought processes;*
- ▶ *monitoring understanding; and*
- ▶ *providing corrective feedback.*

- By teaching sameness both within and across subjects, teachers promote the ability of students to access knowledge in any problem-solving situation.

Teach sameness to link a single concept with many ideas and provide students with numerous examples to promote generalization.

- Using formative assessment as a diagnostic tool can help teachers make the necessary adjustments to their practices to meet the individual needs of students.

Use formative assessment throughout lessons to formally or informally monitor student progress.

- Teachers can gain more class time for academic instruction by directly teaching classroom behavioral expectations and routines to students.

- ▶ *State expectations positively ("raise your hand to answer a question" instead of "no calling out").*
- ▶ *Acknowledge students when they display appropriate behaviors.*

- Students achieve greater success when supported by intentional and intensive family engagement.

Communicate with parents and involve them in activities focused on specific, targeted content such as behavior, attendance, math proficiency, homework and/or reading.

Adapted from: Ellis, E. & Worthington, L. (1994). *Research Synthesis on Effective Teaching Principles and the Design of Quality Tools for Educators*. National Center to Improve the Tools of Educators, University of Oregon.

