



Teachers' Desk Reference: Practical Information for Pennsylvania's Teachers

Effective Instruction

You, as a Pennsylvania teacher, are key to student achievement. You are developing lesson plans linked to the Pennsylvania Core Standards, but may be struggling to teach the content to the diverse learners in your classroom.

Every day, educators face the challenge of teaching the general education curriculum to students with different learning needs within the same classroom. The use of research-validated instructional methods is one of the most powerful tools teachers have to target the specific needs of individual students.

Research-Based Effective Teaching Principles

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.
By using effective instruction, you will empower your students to actively work to organize their knowledge.

When students are engaged, they are active participants in the learning process.

- 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 assists students in organizing, storing, and retrieving information.

Provide instruction that teaches students how to personalize and adapt strategies, and how to recognize when, where, and how to use them.

- 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.

**Formative assessment is an essential component of effective instruction. Formative assessment is addressed in a separate issue of the Teachers' Desk Reference.*

- 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.

The Pennsylvania Standards Aligned System (SAS) is a collaboration of research and good practice that identifies six distinct elements which, if utilized together, will provide districts, schools and teachers with a framework for effective instruction. Research supports the premise that there are six common elements that ensure student achievement: Standards, Assessment, Curriculum Framework, Instruction, Materials and Resources, and Safe and Supportive Schools. For more information, visit the Pennsylvania Department of Education website at www.pdesas.org.

Implementing Lessons Using Effective Instructional Strategies

You can be successful in teaching all students through the use of effective teaching strategies. As a teacher, instruction is your primary focus. Teachers must be prepared to begin instruction at the start of each class. Ample time must be allocated to cover content, and teachers must make good use of allocated time by actively engaging students in the learning process. Effective instruction also requires sufficient practice for skill mastery. When incorporating instructional strategies into a lesson, it is not necessary to change the objectives or content for the various levels of learners. However, it may be necessary to change how instruction is delivered.

Before the lesson, plan by asking these questions:

- What standards does the lesson need to address?
- What knowledge will students be learning?
- What skills can I teach to help students acquire and integrate knowledge?
- What skills can I teach to help students practice, review, and apply this knowledge?
- How will I know if students have learned this knowledge?

During the lesson:

- Specify what students are to learn.
- Teach what is to be learned.
- Teach how it is to be learned.

- Check for understanding and comprehension.
- Engage students in initial practice.
- Monitor progress.
- Provide systematic feedback.
- Monitor and provide opportunities for independent work.
- Provide ongoing demonstrations, guided practice, assessment and review.
- Demonstrate and engage students in effective instructional strategies.

After the lesson:

- Continue assessment.
- Summarize the lesson.
- Conclude the lesson.

When teaching students how to use an instructional strategy:

- Model how to use the strategy with a concept students already know.
- Provide guided practice, which allows the teacher and students to practice using the strategy together.
- Independent practice should occur only after the students had ample opportunity to successfully practice the strategy with guidance from the teacher.

Instructional strategies are not always elaborate or even highly innovative approaches used to teach students. For example, an instructional strategy might focus on:

- Telling how the new lesson is related to the students' prior knowledge.
- Giving clues during the lesson that identify important information to be included in notes.
- Summarizing key points following the introduction of new material.
- Providing more opportunities to respond to questions.
- Teaching memory techniques, such as mnemonic devices.

The main point is to explicitly teach the students the new concept or skill using an appropriate instructional strategy. As you consider which strategy to use, it is imperative to determine how the strategy will be directly taught to students so they can eventually use the strategy independently.

- Before Instruction – Use a strategy that assesses what students already know about the topic.

For more information about specific instructional strategies, read:

- *Improving Student Performance Using Response Cards*
- *Improving Student Performance Using Error Correction*
- *Improving Student Performance Using Time Trials*
- *Improving Student Performance Using Guided Notes*

For more information about flexible grouping, read:

Teachers' Desk Reference: Maximizing Student Learning With Flexible Grouping Practices

Visit the PaTTAN website at www.pattan.net and click on Resources to view, download, or order hard copies of these PaTTAN publications.

- During Instruction – Use a strategy that enables students to be actively engaged in the learning, that improves their comprehension of the lecture/discussion, and that provides them with a structure for identifying concepts and key points.
- After Instruction – The learning can be related back to the instructional objectives using a summary strategy.

Flexible Grouping for Student Achievement

Effective instruction ensures that students have the opportunity to move among learning groups that best correspond with their current performance level. Dynamic room arrangements allow for cooperative and flexible grouping. Flexible grouping means that students are purposefully assigned to a group dependent on the task. Teachers have the role of facilitator, which gives them opportunity to move around the classroom, working with all students.

Types of groups include:

- Ability group
- Whole group (everyone in class)
- Large group (nearly everyone or everyone in class)
- Small group (2-6 students)
- One-on-one
- Individualization (combination of grouping types)

When planning your lessons, consider how you will group students for each activity. For instruction, you may decide to group students homogeneously with peers who have similar academic needs. For other activities, you may want to ensure that students of mixed abilities work cooperatively in settings that draw upon the strengths of each student.

Some learning tasks may call for grouping students with similar learning strengths while other tasks call for grouping students with varied learning strengths (such as pairing a student who learns best analytically with one who learns best through practical application). Flexible grouping with a purpose has many benefits. It gives the teacher opportunities to provide targeted instruction and to compile assessment data for every student, and it gives students opportunities to receive individualized instruction and to focus on their individual strengths.

Helping Students With Organization

For some students, staying organized is a struggle. These students may have trouble finding their materials, making sense of the task you just assigned, or following through with completing a task. By adjusting the way you present information and/or instructing the students on how to complete work, students can learn to be successful in your classroom. Below are some tips you may find helpful when working with students who have difficulty staying organized.

Environment:

- Have the student sit up front, close to the teacher.
- Provide the student with extra work space.
- Seat the student away from distractions (e.g., the door, noisy heaters/air conditioning units, high traffic areas).
- Limit visual distractions
- Reduce noise level during tasks requiring concentration.
- Seat the student among well-focused students.
- Use study carrels or privacy boards during seatwork and test-taking.
- Provide models of completed projects for student reference.

Assignments:

- Write assignments on board, as well as present orally.
- Assist the student with recording of assignments.
- Clarify assignments to students at end of class/day.
- Provide students with handouts that are already three-hole punched.
- Provide assistance with organizing materials.
- Color-code books, notebooks, and/or materials.
- Tape “Things to Do” list on the student’s desk.
- Break down long assignments into smaller chunks/increments.
- Limit the amount of materials/clutter on the student’s desk.

Instruction:

- Increase the amount of modeling, demonstration, and guided practice.
- Make sure students are ready to work alone before assigning independent tasks.
- Make goals, objectives, and expectations explicit.
- Review previously taught skills.
- Provide ongoing, specific feedback and progress (e.g., homework, class assignments).
- Use graphic organizers to show relationships among concepts.
- Provide additional practice with writing prompts.

- Permit the student to dictate while someone else transcribes their responses.
- Give directions in small distinct steps.
- Minimize disruptions, distractions, and interruptions.
- Have the student repeat directions/ instructions prior to starting the assignment.
- Allow extra time for taking/completing tests.
- Alter the type of examination (e.g., true/false, short-answer, multiple choice, essay, demonstration, oral presentation, creative project).
- Provide the student with color-coded, highlighted text.
- Provide the student with an audio recording of the text.
- Use a variety of questioning techniques, allowing for more response opportunities.
- Allow the student to use learning aids (e.g., Franklin Speller, calculators, reading markers).
- Provide instructional materials that are clean and easy to read.
- Have students read assignments in pairs.

By utilizing research-validated instructional methods, you will be successful in addressing the different learning needs of all of the students in your classroom and thereby increase student achievement.

Commonwealth of Pennsylvania

Tom Wolf, Governor

Department of Education

Pedro A. Rivera, Secretary

Matthew Stem, Deputy Secretary, Elementary and Secondary Education

Ann Hinkson-Herrmann, Director, Bureau of Special Education

