



Technology

Additional
Classroom
Staff

Classroom-Based
Library

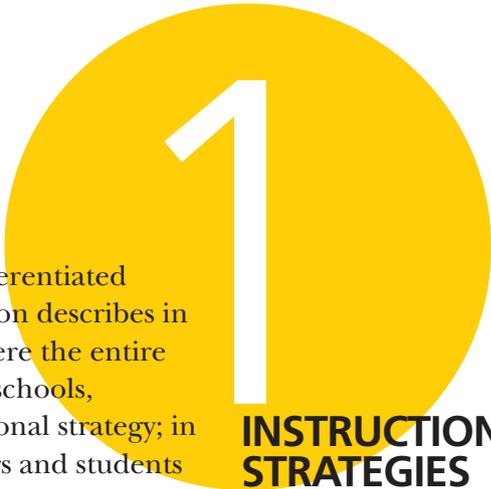
Questioning
Techniques



PRACTICES OF SECOND ORDER SCHOOLS

Principals should implement these strategies to differentiate instruction schoolwide.

By Bill Brown, Patrick Tucker, and Thomas L. Williams



1

INSTRUCTIONAL STRATEGIES

Many schools are in some stage of implementing differentiated instruction, with some already in what Carol Tomlinson describes in *The Differentiated School* as “second order change,” where the entire school practices differentiation. In high-performing schools, differentiation has proved to be an effective instructional strategy; in classroom environments with low-performing learners and students with disabilities, it can have even greater impact.

Principals new to differentiation need to know and fully understand the concept and how it can be used to refine classroom instruction in all content areas. This understanding of schoolwide application across disciplines enables effective teachers to enhance student learning outcomes. One of the challenges for principals is ensuring teachers obtain the necessary training, planning time, resources, and support to implement differentiation successfully in their classroom settings.

Differentiated instruction, according to Tomlinson, is a teaching methodology based on the premise that instructional approaches should vary and be adapted in response to the needs of diverse students in classrooms. Practitioners employing differentiated instruction often ask the question, “What can I do differently to enhance my students’ learning experiences?” Teachers generally begin the implementation phase by introducing a curriculum that is universally designed and provides them with the flexibility to meet each child’s needs.

Universal design involves planning for every type of learner in the classroom by addressing their strengths and weaknesses along with their learning styles. It requires the use of every tool and application available to a teacher so all students can achieve the standards of the general curriculum. The curriculum should always be aligned with the school’s student-centered written course of study by ensuring it is on the child’s ability and interest level. Teachers can identify student interests by using an interest inventory or asking open-ended questions. Often, having a firm understanding of students’ preferences affords teachers the opportunity to align instructional strategies with student interests.

Principals must encourage teachers to think beyond the traditional classroom environments and adopt differentiated practices in every classroom. In addition, following these nine practices should help every school in transitioning to a “second order” school.

When conducting a walkthrough observation of classrooms, principals should evaluate how teachers tailor their instructional strategies to ensure all students are engaged in active learning. Look for multiple methods of instruction and whether the teachers have set clear goals and objectives. Watch for multisensory instruction in which segments of content are presented through auditory, visual, tactile, and kinesthetic teaching. In theory and practice, the teacher presents 20 percent of the lesson using direct instruction, 10 percent by reading relevant material, 10 percent through audiovisual instruction, 10 percent through demonstration, 20 percent within discussion groups, 15 percent with hands-on experience, and 15 percent by having students reteach their peers the presented lesson. Additionally, when walking through a classroom, an administrator should not see students putting their heads down or throwing their hands up in frustration.

The teacher checks for understanding through several phases of the activities. Teachers should conduct observations by walking around the classroom and listening to the way students are responding to one another. One-on-one conferencing is also an assessment method used to identify students’ mastery of new concepts. While this method of evaluation is the most effective, it can be time consuming. Some teachers allow students to be teacher-for-the-minute to explain to the class how they solved a problem.

2

Cooperative Learning

Cooperative learning is at the core of differentiated instruction because it provides a framework for students to demonstrate a higher level of scholarship. Effective cooperative learning models typically entail the following characteristics: groupings of two to five students, structured activities that require students to complete an assignment, roles for group members, positive interdependence, group processing, formative or summative feedback from the instructor, and assessment.

For example, a teacher at the Williams Academy in Sacramento, California, cultivated a cooperative learning environment during a science lesson by establishing mutual goals in each group. The teacher arranged students within the groups face to face, and she ensured each group member understood his or her required contribution to the project. Paraprofessionals situated in between the groups ensured ease of access to the students and monitored group productivity. At the end of the lesson, the teacher encouraged each group to reflect on how well they worked together and what improvements needed to be made to ensure successful completion of the assignment. The teacher assessed learning by observing and documenting individual contributions to the group's discussion. Randomly selected students presented sections of the group's work to the learning community.

To sustain a high level of student success, teachers need to think beyond the traditional classroom environments where there is an over-reliance on homogeneous grouping. Differentiated classrooms with heterogeneous groupings allow students to learn from one another and share ideas on a broader scale and knowledge base.

5

CLASSROOM-BASED LIBRARY

Selections in a classroom library should represent the various reading levels of the students in the class, and the level of the book must not be obvious to other students. Teachers should create an atmosphere where students should not feel embarrassed about choosing a lower level book for self-selected reading. The location of the classroom library is also important. If students have to run an obstacle course of desks to get to the books, they are less likely to read during independent time. A room should have comfortable areas for students to sit and read.

3

Questioning Techniques

A teacher at Silver Grove Elementary in Silver Grove, Kentucky, practices differentiation by grouping questions asked during a discussion. The teacher begins each lesson with recall questions and ends with questions that involve critical thinking skills. The questioning strategy allows lower-achieving students to build confidence by answering questions through the continuum. The differentiated questions allow students to offer their opinions and connect the material to elements of their everyday life. After reversing the order of questions, the teacher found that the lower achieving students became engaged in the discussion as they gained confidence by responding earlier in the discussion to opinion and experience questions with no wrong answer.

4

Individual Instructional Pedagogy

Principals should be aware of teachers' instructional pedagogy because it is the definitive source of differentiation. Ensure that teachers are spending time with individual students, which will likely result in meeting more students' individual needs.

For example, an eighth-grade teacher at the Williams Academy set up a learning center in the back of her classroom. The learning center consists of a table with four chairs, paper, pencils, calculators, index cards, beakers, mixing solutions, and a computer. The teacher asks three students at a time to sit at the learning center to prepare for a science experiment by using teacher-made index cards. Once the students answer each question several times, the teacher assesses the group's level of mastery of the content presented on the index cards. If the students are able to collectively answer 90 percent of the questions correctly, they receive a pass to complete the scheduled experiment. To culminate the activity, each group returns to the learning center to compare their findings with their answers to the questions on the teacher-made index cards.

6 Classroom Environment

A classroom that encourages cooperative learning and invites students to approach the teacher is better suited for differentiation. The teacher's movement should be unrestricted to all students in the classroom. If desks are situated in tight rows and the teacher's desk is hidden in the back of the room behind file cabinets, there is little chance for individual work with students, who will most likely be treated as a group rather than as individuals.

Principals should encourage an environment of pluralism, which can help students draw connections between their experiences and those of their classmates. Posters and work displayed in the room should represent the various cultures present in the class. Posters in Spanish and English help ESL students feel more comfortable. Posters featuring racial variety can help students feel included.

7 Technology

With significant advancements in the smart phone and tablet industries, students have the ability to download educational applications that function as assistive technology. Programs that provide immediate feedback to students and offer motivation through a game-like interface are valuable learning tools. Teachers should make computer stations accessible with time planned for student use; principals should observe the availability of computers in the classroom and the ease with which they are used by students. Computers should be located in a designated area of the classroom where students can work independently or in group settings without distractions.

8 IEPs and 504 Plans

If possible, the principal should discuss individualized education plans (IEPs) and 504 plans with each child's teacher. The discussions do not need to be lengthy, but the principal should be certain at the end of each discussion that the teacher understands how to identify instructional strategies described in the plans. The principal can also explain to the teacher that the strategies outlined are not limited to the students with these plans. Any successful strategy can be attempted with other students in the classroom.

These plans should be seen as beneficial to the teacher's work since they provide a framework for students' specific strengths and learning needs. A teacher's attitude toward these plans can indicate his or her commitment to differentiation. For example, if the teacher speaks of the accommodations listed in these plans as obligations, he or she probably has a good deal of work to do toward achieving a differentiated classroom.

Additional Classroom Staff

Principals should encourage paraprofessionals and special education teachers to operate as true co-teachers. To foster differentiation, principals should design a schedule that allows teams to have common planning time, during which teams can discuss each child's needs and strategies to employ. This might be difficult in a small school, and the principal might need to consider unconventional times for group work such as common lunch time where teachers and paraprofessionals can informally discuss classroom practices. Also consider covering issues in email messages so that faculty meetings can include time for organized staff discussions.

The best way to motivate children is by letting them know how important their work is and how their teachers will help them meet goals. Teachers need to be transparent in their feelings for every child to display how much they care about their well-being. While teacher empathy might seem intangible, some practices provide evidence. For example, principals can collect samples of written teacher feedback on writing assignments, require teachers to provide positive running comments to students in their suggestions for improvement, and expect teachers to greet students as they enter the classroom.

Principals who want second order change to permeate their building must provide opportunities for teachers to use a multitude of differentiated strategies. Curriculum must be aligned with state standards but presented in a manner that takes into consideration the learning modalities of each student. 

Bill Brown, a retired superintendent, is a professor in the Special Education Leadership Department at Capella University.

Patrick Tucker is assistant principal of Elder High School in Cincinnati.

Thomas L. Williams is principal of The Williams Academy in Sacramento, California.

Principal ONLINE

Access the following Web resource by visiting *Principal* magazine online: www.naesp.org/SeptOct12

 The University of Virginia's Curry School of Education **DifferentiationCentral** website provides information and resources, including lesson plans, strategies, and tools, that will deepen your understanding and enhance your practice of differentiated instruction.