

Differentiating Instruction for Middle and High School

Training Module 1

Gathering and Managing Data

Includes the following topics:

- Developing instruction management**
- Collecting data for assessment**
- Using mailing labels to manage data**
- Using mailboxes to manage assignments**
- Assigning mailbox monitors**
- Organizing with Do/Done folders**



Key terms presented in Module 1 include:

Assessment

Baseline

Data

Do/Done Folders

Formative Data

Mailboxes

Mailing Labels

Student-focused Instruction

Student Variance

Summative Data

Task Approach

Refer to page 32 for complete definitions.

Module I: Gathering and Managing Data

Introduction

Teachers readily admit they struggle with management, alternating time periods for whole class and small group differentiated instruction. The two questions most frequently asked by teachers involve management concerns. Teachers want to know: (1) how they are supposed to get everything done, and (2) what the rest of their students are doing when they are working with a small group (Evertson, et al, 2006; Marzano, et al, 2003).

Today, teaching is more challenging due to student populations with diverse needs and the inclusion of students with special needs. Teaching differently to accommodate the diversity in classrooms requires identifying students' existing competencies and needs. Currently, teachers are expected to diagnostically and prescriptively teach all students in their classes. They must differentiate instruction by modifying classroom environments, behaviors, and instruction. This type of differentiation is not simple; it is a constant and complex challenge even for master teachers.

Teachers need tools to help them use data to inform practice, manage instruction, and satisfy instructional demands. They need proven methods for using data to inform teaching and help them select activities that are purposeful and productive.

Specifically, teachers need to know:

1. How to **collect and use data** for diagnostic decision-making about placement in curricula, how to group students for instruction, and how to monitor student progress and achievement;
2. How to **select appropriate teaching strategies, activities, and materials** that are skills-focused and adaptable to student variance; and
3. How to use **flexible grouping practices and patterns** to manage whole class and small group instruction.

Successfully differentiating instruction begins and ends with a clear understanding of two things: first, students' capabilities and needs as defined by their current skill

performance, and second, where your students are in relation to district/state standards. Observing and assessing student performance helps teachers understand what skills/strategies to teach and where to begin instruction. Teachers must know where a student's skill set breaks down so meaningful instruction can be provided. Collecting evidence, or data, to support decision-making is essential.

Data may be collected using formal assessments or informally during observations in class and on work samples. Analyzing patterns of error on written assignments or work samples is helpful. In middle and high schools classrooms, teachers can privately discuss current performance with students and inquire about needs. Working with students in small groups provides excellent opportunities to informally assess needs for adjusting instruction and practice activities. Recording observations during small group lessons is atypical of middle and high school instruction, partly because grouping for instruction is less common. We will suggest some simple ways to manage data and paper to increase efficiency.

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Managing Data and Paper

Most school systems have adopted standards and schedules for collecting assessment data. Depending on the instructional purpose, a teacher collects either formative data to inform instruction or monitor student progress, or summative data to assess achievement. Data is often collected throughout the year and at preset intervals. However, collecting informal assessment data in authentic teaching situations helps teachers make important diagnostic and prescriptive decisions. Thus, using formative assessments and probes, as well as recording comments about observations, helps teachers determine what students understand and what wasn't learned or needs further practice for proficiency.

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Most teachers are natural data collectors and they perform informal assessment tasks automatically when they work with students. Teachers observe, listen, and think about what is working or needs modification. Often teachers adjust instruction based on their interactions with students, but charting their observations or recording their

modifications to inform practice does not always occur. Many teachers report they do not have time to accomplish those tasks.

There are several ways for teachers to informally collect and analyze data during instruction to determine next steps for student-focused teaching. Teachers should think about their purpose for collecting data and how that data will be used in order to determine the best method for collecting and managing data. Data helps teachers identify both how to teach students and what to teach.

Collecting Data While Teaching and from Work Samples

Observing students' task approach helps teachers estimate students' feelings of confidence in their competence. This helps teachers determine if sufficient instruction has been provided.

At first, collecting data while working with students in small groups may sound overwhelming; the process of monitoring students' responses as you teach is what usually occurs. Providing constructive feedback also occurs frequently in response to students' questions. Thus, the process of simultaneously teaching while also monitoring comprehension ensures instruction is meaningful and useful. Before assessing a skill, it is important for teachers to select an activity that allows students to demonstrate the skills they want to observe. For example, teachers may want to choose an activity that allows discussion so they can listen and analyze students' thinking before assigning a written assignment.

Closely observing students' task approach helps teachers estimate students' feelings of confidence in their competence. This helps teachers determine if sufficient instruction has been provided and students can use the information. For example, simply observing and judging students' timing is helpful. In other words, how quickly students begin working on an assignment and complete it with minimal support indicates their skill competency and confidence in what they think they know. Listening to students' comments and questions helps teachers determine who needs additional instruction or more interactive practice.

Setting a Purpose for Collecting Data

Typically, the purpose for collecting data in small groups is to monitor student progress and determine if adjustments are needed for instruction, curriculum, or



grouping patterns. However, day to day there may be specific skills or behaviors needing particular focus. For example, if students are soon to be tested for mastery on particular skills, teachers may want to informally assess students using those skills in a small group activity so that constructive feedback may be provided before final assessment occurs. Listing a purpose for assessment helps teachers remain consistent and focused when working with each small group.

To help focus assessment opportunities:

1. Determine the purpose of assessment by identifying specific skill(s) to be observed.
2. Determine which students will be observed, when they will be observed, and how they will be observed (in a small group or individually).
3. Identify a baseline or benchmark for acceptable performance, or what defines mastery, for that skill at that specific time of introduction, practice, or development.
4. Model and review the concept or skill to clarify expectations to the students.
5. Provide students with multiple opportunities to demonstrate skills with a partner before assessing them independently.

Charting Observational Comments on Mailing Labels

Teachers can use sheets of adhesive mailing labels, standard size or larger, clipped to a clipboard to chart their observational comments. Individual comments may or may not be written for every student each time a skill is assessed.

Use the following steps to write positively stated comments that summarize observations or identify student needs:

- 1. Write the purpose** of the observation on the first mailing label to maintain focus during the time of assessment.
- 2. Use one label per student** to be assessed. Write each student's name or initials on a label with the date of observation.
- 3. Write positively stated comments** on each label to summarize individual performance or identify needs for additional instruction.
- 4. Later, peel off each mailing label** and attach it to a separate sheet of paper. File each student's paper with the mailing label in his/her mailbox or portfolio.* The process is similar to maintaining running records, only the teacher is using mailing labels to capture and store comments. Each label becomes a data point used to monitor student progress over time.
- 5. Use the comments** to plan lessons, select materials and activities, group students for instruction, and monitor or report progress.

*More information regarding mailboxes and portfolios will be provided later in this module.

Charting observational comments should not be intrusive to instruction. The behavior for observing and charting comments occurs as if teachers are making a quick note to themselves on a notepad. The mailing labels must be easily accessible. Keep a clipboard with sheets of mailing labels near the area designated for teacher-led instruction. As students interact, observe their work habits and skills, and chart comments. Students in middle and high school classrooms can add input about their needs and you can chart their comments on mailing labels.

Finding Time to Observe and Write Comments

During a small group lesson, use the last few minutes to ask questions and determine students' understanding of the content or concept that was taught or practiced. Listen and chart comments on labels, using one label for each student targeted for assessment on that day. Write the comments where students can see and read the comments written about them. Soon your students will begin to tell you what to write, thus identifying what they need and want to improve. Since students and other teachers may read your comments, you need to choose words carefully.



Writing Positive, Personalized, and Proactive Comments

It is important to write positively stated comments on the mailing labels. Comments need to communicate the desire to provide meaningful instruction for each student. The comments are kept in student portfolios so many eyes may have access to them. Writing supportive, helpful comments to direct instruction or to compliment progress is informative to other support personnel that may be working with a student. Parents are also encouraged to read the comments.

Suggestions for writing comments about observations:

- Use positive words and present tense verbs: *Sam multiplies fractions.*
- Use specific language that communicates what the student needs: *Marissa needs help with writing rules for commas, semicolons, etc.*
- Use specific language to chart success: *Wow! Ian learned subject/verb agreement.*
- Write personal comments in the presence of each student, then read and share your comments with the student to build trusting relationships.
- Read your comments to students before filing labels in their portfolio or mailbox. Ask for their input or suggestions to discuss, compliment, and encourage student progress.
- Review comments periodically with individual students and encourage them to make comments about their progress and achievement.

Help students set goals using the data that has been collected.

Creating Mailboxes (or Portfolios) for Data and Paper Management

Teachers save instructional time by developing a system for data and paper management. They can create order by establishing consistent routines and procedures for managing papers such as homework assignments, report cards or assessments, and other general communication.

The system works best when it is applied as a standard classroom routine across all grade levels/departmental teams on a campus. Students learn how to be responsible and accountable as they perform these tasks. Students develop organizational behaviors using routines for bringing papers to school, taking them home, and filing them properly for review. These routines become habits for successful school behaviors.

We have suggested a non-intrusive way to integrate assessment with instruction using mailing labels. We mentioned that these labels are filed in student portfolios or “mailboxes”. Our recommendation for efficient paper management revolves around the concept of mailboxes. Upon entering and departing from a classroom, students will check their mailboxes, add papers that need to be turned in for review, and “retrieve their mail”, or collect papers that need completion or revision. Mailboxes may be stored in a designated “Business Center,” as described in Module 4.

Mailboxes are created using standard hanging file folders stored in open, plastic crates. Teachers can organize the mailboxes by printing students’ first and last names on each hanging file folder and placing them in alphabetical order in a plastic file box. A color coding approach can help keep different classes separate. For example, all 8:30 a.m. (or first period) class folders may be blue while 9:30 a.m. (second period) class folders are green, etc.

Every student, teacher, or paraprofessional has a mailbox with her/his name on it. Everyone develops the routine of checking her/his mailbox daily upon entry and departure from the classroom. All assignments and papers originate from and are returned to the mailboxes. Teachers put assignments in mailboxes so students can retrieve them and add them to their Do/Done folders.

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When students complete assignments, they follow teacher directions for turning assignments in for review. Students either put individual assignments in their mailbox upon leaving the classroom, or they put their Do/Done Folder in the mailbox for review. The mailboxes become a filing system that helps students develop responsible organizational skills. Students learn an important habit. Checking and retrieving their mail on

a daily basis keeps them informed and up-to-date on performance expectations. Do/Done folders will be described in further detail later in this module.

For middle and high school students, using the same routines helps students transition from class to class. Learning new routines for each teacher is not required. Consistency becomes the key to efficiency and success.

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Creating procedures for paper management has many advantages:

- Students become more accountable for their work and responsible for submitting assignments on time.
- Students learn to organize materials, assignments, field trip or permission forms, report cards, etc., in one place for easy retrieval and use.
- Students learn to file incomplete or complete assignments in one place for continued work, completion as homework, or teacher review.
- Students learn the importance of establishing routines for responsibly handling important documents such as work assignments.

Teachers should model how students are expected to deposit mail in mailboxes upon entering the classroom, or prior to and immediately following small group lessons. Students learn to check their mailboxes before leaving the classroom to collect assignments that may need completion at home. Mailboxes become the “in and out” process for storage and paper management.

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Teachers may also ask students to sort the work samples in their mailboxes and maintain a six week or nine week notebook/portfolio. This activity may be completed at the end of each week or at the beginning of a new week. Students learn to organize work samples by topic or date completed. This process helps students monitor their progress while teaching them personal organization skills.