

Standards-Based Instruction for All Learners:

*A Treasure Chest
for Principal-Led Building Teams
in Improving Results for Learners Most At-Risk*



Ohio Department of Education
Office for Exceptional Children
Office of Curriculum and Instruction
Columbus, Ohio 43215-4183

2004





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FOREWORD

Jerome Bruner, one of the most influential educators of the 20th century, was probably not thinking about this *Treasure Chest* when he wrote:

“We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development.” (*The Process of Education*, 1960).

In an age of standards-based reform, teachers face tough challenges. They must ensure that all children achieve at high levels. Because we now have standards in Ohio for English/language arts, mathematics, social studies and science, foreign language, technology and the arts, the stage is set. Standards clearly delineate what all children should know and be able to do.

Undoubtedly, there is diversity in every classroom, as children learn in lots of different ways. Although standards describe for teachers what *all* children should know and be able to do at every grade level, the strategies that teachers use to help every child achieve requires pedagogical knowledge and sophistication. It is for this reason that this *Treasure Chest* was written.

This document offers something that other guides seldom do: an informal but reliable account of how one goes about trying to implement solid, core instructional strategies, while concurrently differentiating instruction for diverse learners. This book gives instances of diverse learners, including those who have disabilities, but it is not a *special education* guide. Rather, it is a guide that provides ideas for thinking about standards, assessment and instruction, while considering the diverse needs that millions of children bring with them to classrooms across the nation.

The *Treasure Chest* is not another tool to help teachers and administrators determine when and how to make special education eligibility decisions. It is not intended to promote more discussion about which children should receive special education or which children should not. Rather, it is about delivering the right kind of instruction, at the right time and with the right intensity, to all children. It is about building capacity in schools through discussion of best practices in linking assessment, standards and instruction, so that all children can achieve at high levels.

The Ohio Department of Education's Office for Exceptional Children and Office of Curriculum and Instruction extend our thanks to the Ohio Association of Elementary School Administrators (OAESA) and the Ohio Association of Secondary School Administrators (OASSA) for working with us to develop the *Treasure Chest*. Our appreciation is extended to the development team and to Rachel Quenemoen of the National Center on Educational Outcomes (NCEO). We believe every teacher will find that this book contains scenarios and “dialogue” that are familiar. A special effort has been taken to omit complicated “jargon” and to include language that can be heard in every school in which teachers are challenged to provide differentiated instruction. Finally, a special “thank you” to Margaret Searle, President of Searle Enterprises, who drew on her many years of experience as a teacher and principal to author this book.

Today, we recognize clearly through educational research studies, that we can predict and prevent academic failure. We hope that this book contributes, in some way, to further that recognition.

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Introduction

Cherise sits in math class knowing the exact answer to the multi-step problem posed by her teacher, but is stumped by the teacher's instructions to illustrate and write each step of her thinking. Kae Lee is struggling with English class, but could easily move ahead a grade because of her strong understanding of math principles and patterns. Marla, who is still figuring out basic addition and subtraction problems, writes wonderfully intricate stories of mystery and intrigue to entertain herself.

This range of student strengths and weaknesses is nothing new to educators. We have always asked, "How can one teacher possibly meet the needs of all these diverse learners?" The *Individuals with Disabilities Education Act* (IDEA, 1997) and *No Child Left Behind* (NCLB) legislation has not changed this challenge. Great teachers have always felt the need to help every student grow. What has changed is that we are now accountable for the progress of every learner.

Throughout the book, statements of special importance will be highlighted in a box like this one.

How do we reach students with such diverse skill levels? Can teachers be all things to all students? *A child's mind is a veritable treasure chest, full of possibilities waiting to be opened and freed to run its course.* Our job as educators is to find the keys that unlock the potential of all students. The following chapters will attempt to identify keys to success, giving teachers and administrators ideas about how to meet unique needs in widely diverse groups of learners.

Some say, "We used to struggle with meeting the needs of students with varying skill levels and varieties of educational experiences and cultural backgrounds. Now we have growing numbers of students with limited English proficiency and more children with disabilities in our classrooms. How can we meet their needs?" When asking a group of teachers, "Who among you teach students who are in more academic trouble than students with Individualized Education Programs (IEPs)?" most hands go up. The range of needs has always been there regardless of labels, but accountability for making sure that all children make progress is an idea that is new to many educators.

The second struggle is that teachers and administrators are feeling that too much is being loaded onto their plates at once. This book is an attempt to help educators meet those challenges by supplying a treasure chest of ideas to help connect the dots among the key components [standards, assessment, essential understandings, differentiated lessons and units, rubrics, grading, grouping, intervention assistance teams (IATs), individualized education programs (IEPs)] for implementing a standards-based curriculum. What, at first glance, can seem overwhelming, can actually be more manageable if we can see how the pieces fit together.

Most people would agree that the goal of meeting the needs of all students as they successfully learn the academic standards is not faulty. The problem is that it is difficult.

Each chapter in this document will provide answers to questions that teachers ask frequently. This collection of key ideas and procedures is grounded in research. Suggestions require no new resources. Instead, they will help educators reorganize the ones that already exist.

Some of the questions often asked by teachers that led to the development of this document are:

1. How do I get a student with third-grade level skills to meet sixth-grade indicators?
2. How is it fair to hold me equally accountable when the teacher across the hall has students in her class with higher achievement levels?
3. I am so busy keeping one group from getting lost. I do not have time to provide enrichment and extension activities for gifted children. Am I accountable for meeting their needs too?
4. What do I do with students and parents who just do not care?
5. If we have no common planning time and the principal and superintendent are not supportive, how will our school make Adequate Yearly Progress (AYP)?
6. What if I am the only intervention specialist in the school and students with IEPs are in every grade? Am I supposed to see that they learn with their peers and help other struggling students, too?
7. How can I cooperatively teach with a person who is the “crab of the universe?”
8. If no child is to be left behind, what happens when my unit on fractions is finished and six students still do not get it? Do we wait until they do?
9. If I make accommodations for some kids, how do I grade fairly when they have not done the same work?
10. Exactly what is meant by standards-based instruction?

To address the first nine questions, it may be helpful to begin with Question 10. Standards-based instruction means that every teacher in the school uses the district curriculum that is aligned to the state content standards as the focus for teaching. Teachers cannot afford to spend days planning the Thanksgiving feast, unless the preparations can be linked directly and purposefully to grade-level indicators. Likewise, they cannot go through the textbook page-by-page unless this practice leads to attainment of the grade level indicators. In many cases, creative lessons and textbook pages can be matched to indicators, but too often this focusing step is not taken.

All teachers at each grade level must agree on what quality work looks like as they interpret the indicators. To say that standards-based instruction is truly being implemented, these standards of excellence must be made clear to parents, students and teachers.

Students and teachers need to know the indicators being learned each day. It helps if they are posted.



Question 1 asks, “How can a student with skills far below grade-level possibly master grade-level indicators?”

It is not the job of the teachers to change grade-level expectations, but to change the way students can move toward meeting these expectations.

If a student begins the year three grade levels behind, the job is to close the gap between where the student starts and the grade-level indicators to the greatest extent possible. This means teachers have to choose how to spend classroom time very carefully. For struggling students, it will help to ask, “Which indicators will make the biggest difference in this student’s progress?” Those high-leverage or “power” indicators warrant the most focus. With a few students, it may not be possible to make a year’s growth on every indicator, but the benchmarks will help guide decisions about which indicators can be de-emphasized this year and become prime learning targets for next year.

Benchmarks signal the two- or three-year span in which the student can hone his or her skill level. Some students may need to achieve this mastery with special accommodations in place to assist them (i.e., text read to them, speech-to-text technology, calculators, spell-check, interpreters, scribes, etc.). *The bottom line is that every student needs to show a year’s growth toward the benchmark or indicators targeted for the grade-level.*

Question 2 asks, “How can teachers with unequal classes be held to the same level of accountability?”

Teachers must attempt to help each student make at least a year’s growth from the level at which the student enters. If one teacher has a high-performing class and the other does not, the measure of accountability is the same one-year growth expectation. No one expects a teacher to close a three-year gap in a nine-month school year – but we would all celebrate if they did!

Since 1990, research has revealed that the same teachers, year after year, tend to have students who do not make the year’s growth regardless of having high or low-performing groups. Conversely, research shows that the same teachers, year after year, have students who do make the growth every year – no matter what the students’ beginning performance levels happen to be.

Not all students are expected to achieve the same level of complexity. Some will only get the basics this year, while others will become quite sophisticated.

Question 3 asks, “Are we also obligated to show a year’s growth for gifted students?”

This group of students has to be challenged to grow just like any other. Many gifted students come to us able to demonstrate academic skills years above their grade-levels. The question then becomes, “How can we ensure a year’s growth for them? How can we develop and implement enrichment and extension beyond the grade-level indicators by developing differentiated units and lessons that challenge them?” (Chapter 3)

Note: Not all gifted students are gifted academically (i.e., visual/performing arts).

Question 4 asks, “What about students and parents who just don’t care?”

When we work hard to make things interesting and get no response, it becomes frustrating. However, we have to remember that discovering what motivates and inspires students is a huge part of our job. What might be “motivating” and “inspiring” for some students, might not be for others.

Every teacher knows that once the student gets excited about learning, the job is half done. Motivation is the key to great teaching and learning.

Much of the research on motivation indicates that some students thrive on and are motivated by a challenge, while other students work hard to avoid failures that could threaten their feelings of self-worth. A classroom atmosphere that makes it safe to “try” is critical to motivating “failure-phobic” students. Students are more likely to be motivated when they:

1. Feel that the material being learned is both understandable and useful;
2. Believe it is possible for them to learn the material;
3. Have some choices about what is learned and how it is learned;
4. See the relationship between effort and the pay-off of success.

When parents do not appear to support their child’s learning, two questions to ask may provoke thought. The first is, “If I had to walk in their shoes, would I understand why they respond the way they do?” Too many times a parent’s perceived negativity is a reaction to what they may view as unkindness or insensitive actions on the part of school personnel. They may be reliving their own negative school experiences as students.

A second question that must ultimately be asked is, “Is this within my circle of influence? If not, I need to do the best I can and not let the issue be an excuse for me not to try my best.” The blaming game is a poor use of human time and energy. It never pays off, but going forward and addressing what is in our circle of influence does.

Efforts to create a parent-friendly environment in schools pay big dividends. Clear and regular communications that assumes parents care and want to help is a good start. Treating parents as partners and honoring them by joining in celebrating their children’s successes goes a long way toward creating the kind of relationships that make cooperative problem-solving easier. (Chapters 1 and 4)

Question 5 asks, “What if the administration doesn’t actively support the faculty in meeting the new challenges?”

A key factor in establishing and maintaining an effective school is the quality of leadership. When administrators are not able to articulate or demonstrate clear expectations, the school climate and effectiveness suffer.

Leaders in effective schools make certain the following things take place:

1. All teachers implement a challenging, coherent curriculum.
2. Time is spent on teaching standards. Instructional time is protected.
3. High expectations for all students are clear and measured by a system of formative (as you learn) and summative (after the learning) assessments. Students receive feedback in a timely fashion and in a variety of ways besides assignment of grades. (Chapters 2 and 4)
4. Parent and community communication is open and frequent (i.e., assessment maps, newsletters, e-mail, phone calls, volunteer opportunities, IAT participation, committees, etc.). (Chapters 1 and 4)
5. A safe and orderly environment is maintained (e.g., rules for respect, a caring climate that teaches self-discipline and responsibility). (Chapters 2-4)
6. All teachers are involved in team planning for academic excellence. Teams focus on building, sharing and critiquing teaching plans that focus on standards. Teachers jointly assess the quality of student work and develop plans for improvement. (Chapters 1-4)
7. Staff development opportunities are focused on the school goals and are embedded in ongoing team operations. (Chapters 1-4)

The rest of the questions are answered in detail within the body of this text.

Chapter 1 describes a way to organize the indicators in an **assessment map** to set specific expectations and a systematic spiral and review system for each level. *This step is key to making the other steps happen efficiently.*

Chapter 2 discusses ways to use the map components to **design lessons and units** that address diverse student needs and motivation levels in terms of: assessment and activity design; rubrics; accommodations; grading; and high-leverage teaching strategies.

Chapter 3 addresses a variety of options and guidelines for **working in teams** to deliver lessons based on work done in Chapters 1 and 2.

Chapter 4 provides an in-depth description of the **Intervention Assistance Team (IAT)** as a tool for student, teacher and parent involvement in the problem-solving process based on standards achievement.

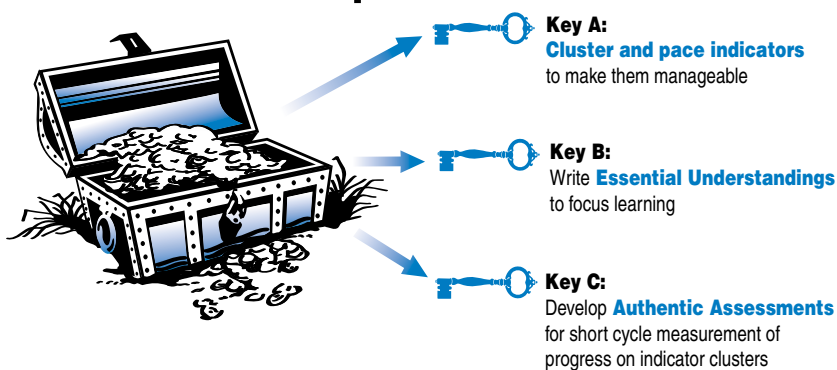
Caution:

The intent of this book is to provide ideas to guide and support, not to create at-risk teachers by overwhelming them. It is best to assess your faculty's level of readiness and choose one or two ideas for implementation at a time. A three- to five-year plan is reasonable for school reform as you, the educational leader, follow this treasure map to successful standards-based instruction.



Chapter 1: Standards-Based Assessment Mapping

Assessment Map



Both federal and state laws address equity concerns – access to common standards, challenging curriculum, effective instruction, general education collaboration and full integration into standards-based reform. Meeting this mandate requires some rethinking of past practices. Since we are ALL responsible for teaching ALL students using grade-level indicators as the target behaviors, we need efficient systems for promoting clear and regular communication.

This chapter contains the important guidelines for promoting efficient and useful collaboration among teachers at grade, department, building and district levels. The critical first step is using the standards to create **assessment maps**. Maps are locally approved guides for assessing achievement levels on a limited number of indicators and understandings each month. This document establishes a precise focus for planning and/or delivering standards-based instruction that meets every student's needs (Chapter 2). Maps serve as the basis of decision-making for scheduling and collaboration among faculty as well as the focus for discussions about interventions, accommodations and modifications (Chapters 3 and 4).

Maps can also be powerful communication tools used to give students, parents and community members an idea of what is expected of students and how the curriculum plan builds from month to month and grade to grade.

General education teachers, intervention specialists, counselors and fine and applied arts faculty will find that maps allow them to coordinate and integrate plans.

Integration and coordination are the hallmarks of high-performing schools and are critical for increasing student achievement.

Assessment Maps: A Way to Solve Problems

Mary, a fifth-grade teacher, and her two partner teachers are feeling like they are going down for the third time. They just received their fourth book of content standards in a meeting during which the principal emphasized the liability for failing to have all children meet these standards. No one disagrees with the idea that *no child should be left behind*, but the job seems overwhelming. There are hundreds of new indicators in four different subject areas, all to be taught before the “test” is given in March. Mary’s thoughts are, “It’s tough enough to do this for the students who do not have significant academic difficulties, and now we have to worry about all of them. What if these indicators don’t match our adopted texts?”

Larry is a high school intervention specialist who has always taught students in grades nine through 12 in an intervention room pullout setting. The reading skills of his students range from second through sixth grade. Writing skills are just as diverse. Larry is aware that he is responsible for his students to make steady progress toward grade-level indicators, but he is wondering how he can pull this off. He has not even received copies of the content standards and doubts if he could find the time to read them all if he did. The general education teachers are talking about struggling with aligning these indicators to their courses and they have only two or three prep periods a week. How will he ever begin to meet this challenge?

Denise is the principal of an elementary building (kindergarten through fifth grade). Her fourth-grade team of teachers expressed concerns about what incoming students have and have not learned. The third-grade teachers have very different teaching styles. This has always been an issue with parents. Some parents back the teachers who push for “high levels” using a very structured drill and practice approach, while some prefer the teachers with the more “creative approaches.” They cannot agree on how students should be taught to read and write and what mastery should look like at a third-grade level. Consequently, new fourth-graders enter with various qualities of skills. Denise was hoping the new standards would bring more consistency, but all of the third-grade teachers believe they have sufficient plans that match the standards. Denise is wondering if she should insist that the teachers come to some common agreement for the sake of the children. In fact, she is wondering if teachers in the other three elementary schools in her district should be involved in this discussion, since there is a fairly high mobility rate within the district. She knows parents would feel more comfortable if they knew each teacher was focusing on the same solid set of skills and concepts.

Each of these very different situations involves a similar set of issues:

1. How to get the new standards into a manageable and understandable system;
2. How to align the district curriculum with the state indicators;
3. How to close gaps within and among grade levels;
4. How to deliver these standards with quality instruction for all students;
5. How to communicate and assist teachers as they tackle this challenge;
6. How to keep parents informed and involved.

Why Create a Standards-Based Assessment Map?

Standards-based assessment mapping will help address the following issues and questions that affect student achievement and frustrate many teachers:

1. “There are hundreds of indicators and I have to cover them before the test in March. How am I supposed to do that?”

One of the hardest decisions teachers face is not “what to teach,” but “what not to teach” in the limited amount of instructional time. Teachers want guidelines for making these decisions.

The ability to weave isolated skills around essential understandings to focus instruction effectively is a key to making the curriculum fit into the time allotted. As pointed out by the synthesis of 35 years of research done by Robert Marzano (2000), **creating a coherent instructional program and then protecting the time to implement that plan is the number one school-level factor affecting student achievement.**

Assessment mapping is a powerful strategy for achieving this end. With mapping, teachers cluster indicators into reasonable sections and sequence them. They establish clear criteria for performance and interpret the standards to coincide with the district’s unique community and resources. Mapping makes the standards more manageable by focusing on just a few indicators at a time.

No faculty member should be excluded from the process of assessment mapping. It is the discussion and creation of the document that results in consensus of the criteria and the personal commitment to the plan’s success. Committees too often create another paper document that no one is likely to want or use.

2. “How am I supposed to get a student who is two or more years below grade-level to reach the grade-level indicators?”

Any teacher is hard pressed to do this alone, but by pooling talent and time, a staff is able to increase its own capacity for narrowing and/or closing the gaps for all students. By creating a unified assessment map, all of those responsible for teaching a given grade-level/course will be focusing on the same set of clustered indicators and target behaviors each month.

Breaking the culture of “I don’t ask you how or what you teach and you don’t ask me” is often a tough shift in thinking, but the advantages are enormous.

The mapping process allows teachers to work together more easily to design differentiated lessons, flexible groupings, interventions and accommodations for students.

3. “If the parents don’t support me, how am I supposed to do this job?”

It is the school’s responsibility to initiate communication and provide an atmosphere in which parents want to communicate. There are no guarantees that all parents will take advantage of this opportunity, but maps of the skills, concepts and understandings for the month often are more parent-friendly than a list of standards or a course of study. Maps should help focus homework, conferences, web-based communication, IAT meetings and home visits that surround specific academic expectations and results.

Providing a parent version of the assessment maps with ideas for at-home assistance will help outline student expectations as well as opportunities for families to support student learning.

How does Standards-Based Assessment Mapping Work? (Scenarios)

Mary’s fifth-grade team decided to create an assessment map for each subject. They chose language arts first, since they felt this content area had the biggest impact on all other subjects.

At first, they tried monthly listings of **all** the indicators to be covered. Because many indicators are taught every month, this became very discouraging as they saw 85 indicators expand to 132 before they even approached January. They were relieved to find that if they identified “power indicators” – the building blocks with real-life applications that are likely to be assessed – (Reeves, 2001), they could select eight or nine supporting indicators in reading, writing and speaking that would cluster around them. This not only developed a clearer focus for teaching, but also served as the basis for just one or two high-level assessments each month rather than 10 low-level ones. This was much easier to manage and resulted in higher quality work.

They saw that there was no need to put an indicator such as, “developing sentence structures” on the map every time it was taught. For the assessment map, it was only necessary to select the month in which the skill would get the greatest focus and place it there for assessment purposes. Students who did not show satisfactory mastery of the skill by that month would be provided intensive intervention.

Focusing on everything means you are doing a good job of nothing. It makes more sense to select only nine or 10 indicators for each month even though more indicators than that are being taught.

Example:**January Grouping of Indicators for Developing the Assessment Map****Power Indicator:**

Writing Application 1: Write narratives with a consistent point of view, using sensory details and dialogue to develop characters and setting.

Other indicators that support this “Power Indicator”:

Reading Application 1: Explain how a character’s thoughts, words and actions reveal his or her motivations.

Reading Application 2: Explain the influence of setting on the selection.

Reading Application 3: Identify the speaker and explain how point of view affects the text.

Vocabulary 4: Identify and understand new uses of words and phrases in texts, such as similes and metaphors.

Writing Process 4: Determine the purpose and audience.

Writing Process 7: Vary simple, compound and complex sentence structures.

Writing Process 8: Group related sentences into paragraphs and maintain consistent focus.

Writing Process 12: Add and delete information and details to elaborate better ideas.

Writing Conventions 8: Use adverbs

Several other indicators could have fit nicely in this January list, but teachers agreed that “less is more.” They decided it was wiser to focus on improving the use of adverbs for sensory details than to try improving nouns, verbs, adjectives and adverbs and risk overwhelming the children with the whole process. Nouns and adjectives had been focus skills in November, so students could be expected to apply those learned skills to the new writing with minor focus and less direct instruction from the teachers.

As a team works together, they find the conversations about how to group the indicators are as helpful as the chart they develop.

They were especially pleased to find that their interpretations of the indicators became much clearer as they developed uniform monthly assessments for checking student mastery. The discussion around “Just what does mastery of this group of indicators look like at our grade level?” was an eye-opening experience for everyone. There was a feeling of real accomplishment as they pooled ideas to create more exciting and challenging assessments than any of them had developed and used when they worked in isolation.

Larry, the high school intervention specialist, decided that the best way to get a grip on the new standards would be to join as many teams developing assessment maps as he could. Hearing the conversations about how to pace and interpret the new indicators was more helpful than spending hours poring over the books alone. The second big advantage was the opportunity to add his ideas to the assessment development. Every teacher had students in class who were struggling, so the general education teachers were happy to have Larry’s views about how to design assessments that allowed students to demonstrate their knowledge in a variety of ways. Larry also was relieved to find that most of the students could master the indicators if the teachers provided the appropriate accommodations.

Example:

Norman could write a business letter (ninth-grade Writing Application Indicator 3) if the teacher would provide assistance with a verbal draft, give him a template and allow it to be typed rather than handwritten. Although his letter did not show the same level of sophistication as letters written by many of his classmates, it would certainly meet the basic criteria for ninth-grade English and it would be his own product.

Janine would be able to explain the structure and function of the parts of a cell (10th-grade Life Science) if the students developed 3-D models of the chemical elements and each lesson included group discussions. Janine would then summarize the discussions using the combination picture/written notes that students were expected to take each day. A valid assessment would be a combination of a written test and oral explanations. She would be able to show mastery of the indicator.

Larry was relieved to receive a copy of the standards-based assessment maps, which would allow him to focus on just a few indicators each month and yet feel comfortable that he would not be skipping anything he was responsible to teach. He planned to share this map with parents during conferences. Larry also was able to discuss ways his students could be successful in lessons with their peers. The best news was that the accommodations needed also would be helpful for other students who were struggling. The mapping process definitely opened up the kind of communication that would make managing the standards easier for both students and teachers in all classes.

Denise, the principal, knows that it is not the third-grade teachers' differences in instructional approaches that cause problems for students. In fact, it is a distinct strength for that grade level to offer a range of teaching options to meet learners' different styles. It is, however, a problem that the teachers do not have consistency of criteria for mastery of the grade-level indicators. This confuses parents, frustrates the fourth-grade teachers and adversely affects student learning.

Denise has decided it is her responsibility to see that each grade level develops a coherent plan to ensure that all students aim for the same level of mastery on their grade-level indicators and that the skills build consistently from one grade level to the next. She has decided to provide one full day of planning for each grade level to design a standards-based assessment map. Each month the map will have: one or two essential understandings; a grouping of not more than 10 related indicators; and one or two authentic assessments to allow students to demonstrate their level of achievement on those indicators. This map will be developed and shared by general and special education teachers alike.



Standards-Based Assessment Map

Third-Grade	Understanding	Indicator #	Indicator	Assessment
Jan.	Using graphic organizers helps people see patterns.	RP6	Create and use graphic organizers (Venns and webs) to demonstrate comprehension.	Read different versions of “Cinderella.” Use a Venn diagram to compare and contrast the different versions of the stories using who, what, when, where and why questions. Explain what you notice about the story patterns.
	Seeing patterns makes predicting more accurate	RP5	Make inferences regarding events and possible outcomes from information in text.	Change one aspect of one of the stories and predict what the new ending would be. Write a letter to one character telling him/her what to do differently and how it might change things for everyone. Check your writing for spelling, punctuation and verb tenses.
		WA3	Write informal letters using proper format.	With your partner, create a dialogue paper by writing a question using quotation marks and commas correctly. Your partner will answer and respond with a new question. Do this six times. (Include some of our suffixes and y-words in your sentences.) Check your writing for spelling, punctuation and verb tenses.
		WC9	Use quotation marks around dialogue, commas in a series and apostrophes in contractions and abbreviations.	
		WC15	Use present, past and future verb tenses.	
		WC6	Follow common spelling generalizations (double consonant, drop e and change y to i).	
		WC5	Use correct spelling of words with common suffixes such as -ion, -ment and -ly.	

*RP = Reading Process; WA = Writing Application; WC = Writing Conventions; Bold type indicates Power Indicator

As the teachers developed their map, they found that their beliefs and practices were not as different as they once thought. Both groups wanted quality work and both were capable of generating engaging assessments. The rubric designs were much more difficult to agree upon, but with a little give and take on both sides and some thoughtful guidance from Denise, the group was able to develop a quality-scoring rubric. They now use rubrics each month as they jointly evaluate a few sample papers from all classes. As this process became a part of the culture, old rivalries gave way to practices of support and sharing.

Later, to ensure coherence from grade to grade, Denise arranged for each grade level to have joint meetings with teachers of the grades above and below them to compare maps and check for careful spiraling of skill levels and expectations. As the staff began to break the culture of isolation, they found that they not only enjoyed the process of helping each other, but also refined and expanded their own instructional plans and practices.

Monthly meetings are held to:

- Review student achievement data
- Revise/update the map
- Upgrade and refine the assessments
- Add rubrics

Three or four times a year cross-department or grade-level meetings are held to:

- Check for consistency of expectations
- Integrate and coordinate maps
- Ask for feedback from other perspectives

Questions and Answers

What is a Standards-Based Assessment Map?

Assessment maps bring about consistency, focus and clearer interpretations of the standards and are key to ensuring that all students have equal access to the general education curriculum.

Assessment maps are the result of ongoing teacher conversations about creating and refining a district-wide plan for implementing the academic content standards. Using the same type of thinking teachers have always used, grade levels or teachers teaching the same content standards meet and design an annual plan to ensure that each indicator gets proper depth of teaching and is assessed in a timely, well-paced manner.

In designing the standards-based assessment maps, the teachers agree upon when and how indicator groups will be assessed. These maps must contain the same indicators and assessments for every teacher within the grade level or course. The standards-based assessment maps then serve as the basic structures for designing the “teaching or curriculum maps” described by Heidi Hayes Jacobs in the book, *Mapping: The Big Picture* (1997). The individual teaching maps give each teacher the freedom to decide when and how the skills and concepts will be introduced and reinforced in class, as long as the agreed-upon assessment is used to evaluate mastery.

What does a map look like?

A map is a month-by-month plan that generally has:

1. Statements which identify one or two essential understandings for the month;
2. Lists of grouped indicators to be taught thoroughly and assessed for mastery during a given month. Indicators are grouped around the “power indicators” (the building blocks with real-life implications that are likely to be assessed);
3. Assessments that provide evidence that students can use multiple indicator skills and concepts to solve real-life problems.

Who should be involved?

Everyone needs to implement the map: teachers of all subjects and all levels (media, technology, fine and applied arts, intervention specialists, aides, tutors, student teachers, etc.). Administrators and counselors provide support.

Even though the team becomes large, the entire grade level of a district should be involved to ensure consistency.

How much time does it take?

Generally, a day or two per subject is sufficient to develop the first draft. Monthly meetings are then held with teams or sub-teams to review assessment results and make recommended improvements to the maps. This goes on forever because there are always improvements and changes that are needed.

Meetings between grade level teachers and sometimes among schools should be scheduled a couple of times a year to coordinate and refine grade level and course maps. (See “Tips for Principals/ Facilitators” pages 17-18 and “Finding the Time” pages 87-88).

What resources do we need?

Typically, teams use chart paper, markers, a set of indicators from the academic content standards (one-sided copies to cut apart), restickable glue (for changes in plans) and scissors. A person familiar with the indicators, writing essential understanding statements, developing assessments and conducting mapping procedures makes the best facilitator.

Resources

Jacobs, Heidi Hayes. *Mapping: The Big Picture: Integrating Curriculum and Assessment, K-12*. Association for Supervision and Curriculum Development, 1997.

McTighe, Jay and Grant Wiggins. *Understanding by Design Handbook*. Association for Supervision and Curriculum Development, 1999.





Key A: Cluster and Pace Indicators

1. Label the chart paper by months.
2. Paste individual indicators within the months the team agrees to teach comprehensively and assess for mastery (placement may differ from where it is introduced on a teaching map). If it is a continuously taught indicator, it can go on any month, knowing it will be informally assessed regularly. Do not agonize over placement at this point. Just find a place where most students will be ready for the assessment.
3. Check for a balance of different types of skills (i.e., not all the geometry or scientific thinking in the same month — spread process skills out; balance reading, writing, and communications in each month).
4. Check for a balance in the number of skills (generally less than 10 for quality purposes). Trying to focus on too many skills in the same month is a recipe for poor quality implementation.
5. Refine the groupings of indicators so they cluster around “power indicators” and are easy to assess as a unit. Sometimes starting with a great assessment project and finding indicators that can be evaluated using the assessment is more efficient and reflects “backwards design.”
6. Design one or two powerful assessments a month that require comprehensive thinking or application of multiple skills and concepts. These assessments should be great fun for the kids to increase motivation and, at the same time, powerful evidence of learning of all listed indicators (see Key C: Authentic Assessments on page 23). For the sake of brevity, informal quizzes and tests are listed on the unit design (Chapter 2), but not on assessment maps. Maps are meant to give a view of this year’s critical structure of teaching at a glance.

Most people end up rearranging the indicators several times, especially during the assessment design step.

Note:

The order of the steps is flexible. Some people like to work on essential ideas first, choose indicators and then create matching assessments. As long as all the parts are present and matched to each other, do it your way and remember, “It is always a work in progress.”

7. In the “Understandings” column, write the essential ideas, insight statements or generalizations students should be able to understand and demonstrate by the end of each month. Do not use skill statements or objectives, but insights that experts understand about the topic (see page 19).
8. Conduct **monthly** meetings during and/or after the map is implemented. These meetings may be with two partner teachers or with many people, depending upon the agenda. During the meetings:
 - a. Examine the results of student learning and decide if any adjustments to the instruction or to the assessment map are in order.

- b. Can teachers help each other with interventions?
 - i. Give assessments with a week remaining in the month. This gives time to implement interventions and enrichment activities before moving on to another major concept.
 - ii. After the “intervention/enrichment week,” some students may still need mini-lessons delivered by intervention specialists, volunteers or other people a team might recruit.
- c. Are there areas within the map that need clarification and refinement? Remember that the map is as much a communication device for people outside the team as it is a guide for teachers. It should be clear enough for a parent or a teacher from another grade level to interpret.
- d. Did a consistency issue arise that needs to be addressed across grade levels or among buildings? For example, does the format for writing research papers build from third to 12th grade? How does the use of graphic organizers become more complex as students move from grade to grade?

You cannot afford to just assign a grade and go on when the student does not get it, but there comes a point when you will have to give the intervention process for that month's skills a rest. Revisit the unachieved skills or understandings a few weeks or months later during another unit.

Tips for Principals/Facilitators about Supporting Mapping

Administrators need to build in consistent monitoring of the map implementation through monthly discussions using real student work as the evidence. This requires time, training and involvement of the instructional leaders.

1. Never try to compose maps with committees. This produces a document to which Heidi Hayes Jacobs refers as a “well-intentioned work of fiction.” The whole crew needs to be part of the conversation that creates this tool in order to feel ownership.
2. Remember to involve teacher union representatives in the planning and leadership of the design process and implementation.
3. Give teams a chance to use and refine one map before launching into the design of another one. People who are overwhelmed do not produce effective maps.
4. Include support and administrative staff in the process so they see their part in implementing this work (paraprofessionals, tutors, Title I teachers, media specialists, counselors, administrators, psychologists, etc.).

No faculty member should have the option to disregard teaching the agreed-upon concepts or neglect to adhere to the agreed-upon criteria for performance of the grade level/course.

5. Assessment maps (placing indicators where they are assessed) may be quite different from teaching or curriculum maps (indicators placed where they are introduced and taught). Teachers may require many reminders about placement because they may be unaccustomed to thinking about planning assessments before planning instructional sequence. Planning this way allows individual teachers to teach the skills when, how, and for as long as they like, provided they are ready to produce the same *evidence of student learning* during the group's agreed-upon target month. Some teachers may want to make a personal teaching map to show where indicators are introduced and practiced after the assessment map is completed.
6. Principals need to find time for the staff to meet and then help them create the agendas for the monthly 30 to 45-minute meetings to evaluate and refine the maps. Groups generally need support developing these agendas for a period of time. Many staffs have not operated in a culture where the discussion centers on using assessment data to determine how well instruction is going. This change from "I am an island" to "let's talk about what you teach and how successful your students are," causes some team members to become reluctant to stay with the task. Unless it is a high-functioning team from the start, teachers will not feel it is their place to call the foul. Administrative involvement is necessary until the team is strong enough to keep the process focused and productive. Even with the most advanced teams, administrative involvement to lend support is critical. (See Teaming Skills on page 80.)

These meetings can vary from month to month. Sometimes the entire grade level or department will meet and at other times, teachers will meet in subgroups or cross-department teams.
7. Visiting every teacher to review student work, asking how the map-plan is going and checking to see if resources or other kinds of support are needed is the key to success. "Inspired teachers" are those who feel encouraged by administrators. "Expired teachers" often get that way because of an instructional leadership vacuum.

There is a direct correlation between how well principals show their support and share responsibility for this work and the degree to which it is likely to affect student achievement.
8. Teams may need help finding and scheduling intervention options for students who do not respond to in-class intervention plans. Often special education and Title I intervention faculty are able to provide valuable input and are willing to contribute, if they receive assistance with flexing their schedules when needed.
9. Putting the maps on the district Web site keeps all grade levels current with updates to maps, which may happen monthly as they are reviewed and revised. Attaching copies of rubrics and assessment prompts makes it easier for teachers of different grade levels to interpret maps.
10. Occasionally, a group will need to be flexible on the months that plans are implemented in different classes because there may be a shortage of materials and resources. Although some of the advantages of cross-grouping for interventions are lost and the time to peer review student work is doubled, it does work out as long as everyone completes all units by the end of the year and uses the assessment performance standards.



Key B: Essential Understandings

What is an Essential Understanding?

It is the key general idea that drives the entire unit of study. It is a statement of what **insight** the students must demonstrate to show evidence of understanding. An understanding is essential if it:

1. Is true for people of all ages and from all cultures;
2. Will serve the student well 10 years from now;
3. Is not obvious, but requires an insight that experts understand about the topic that novices do not (McTighe & Wiggins, 1999).

Essential ideas are not simple statements about a topic, objective or set of skills (see Practice Session on page 20).

What does an Essential Understanding look like?

It is a full-sentence insight about the topic that is true. For example, if the unit is about *rhythms in music*, the essential understanding may be, “The silences in music are as important as the notes.” If the unit is about *adaptations*, the understanding could be, “Some things survive in spite of environmental changes.”

Who should be involved?

Since the essential understanding is the “glue” that holds a unit of study together, both the teaching staff and the students need to focus on this understanding throughout the unit. Effective teachers post either these statements in the classroom as the ultimate learning goal, or the essential questions that will lead to this understanding.

How much time does it take?

Once a person is accustomed to writing essential understandings, it is just a matter of finding the right words to express the idea. Talking through the process with other professionals who ask good questions is the best way to sort and clarify thoughts. (See the scenario in “Struggling to State the Essential Understanding” on page 21.)

This is one of the more difficult shifts in thinking for people trained to think of teaching individual skills and concepts, rather than focusing on key general ideas.

What materials do we need?

The book, *Understanding by Design Handbook*, written by Jay McTighe and Grant Wiggins (1998-99), is helpful in describing how to develop essential understanding statements.

Procedure for Developing Essential Understandings

- Step 1: Decide what key ideas students must understand about the topic.
- Step 2: Ask, “Around what core concept do I want the students to organize all the facts and skills in this unit?” Essential understandings are often statements showing the relationship between two concepts. “**Patterns**” and “**predictions**” are terms that are too general to be *included* alone in essential understanding statements. The statement of the relationship between these terms would work as an essential understanding. “Seeing a pattern allows us to predict more accurately,” would be an example of the essential understanding.
- Step 3: Check to see that the essential understanding is not simply a statement describing a fact or skill, but rather, a genuine insight. If the statement starts with “Understand *How to...*” instead of “The student understands **that...**” it is likely a skill statement instead of an essential idea.
- Step 4: Ask if the statement reflects something that could be understood in one lesson or by reading one chapter in the book. If the answer is “yes,” it is most likely too obvious to be an essential understanding. Essential understandings can be understood on many levels and can be studied over a period of years as the “insight” evolves for the learner.

Practice Session for Developing Essential Understandings

Why are these not essential understandings?

1. The students will be able to design budgets.

Answer 1: This is an objective for a skill or it could be considered an activity to practice many skills, but it is not a statement of what the student is to understand about budgets. A statement such as, “*Budgets are predictions of how much money will be needed for needs and wants,*” reflects an essential understanding.

2. The students will understand the Civil War.

Answer 2: This is a broad topic, but not a statement of what is to be understood about the Civil War. A better statement is, “In many ways we are still fighting the Civil War.” This is an insight people who are not experts in the area do not think about, but one that affects our lives and requires deep thinking to explain.

3. There are three branches of the federal government.

Answer 3: Learning that there are three branches of the government could be accomplished in one class period. It is an obvious fact for anyone who has studied government structure. More insightful is the fact that “*The U.S. government is set up as a system of checks and balances.*” It takes many lessons and examples for students to explain how this system works. Even at an advanced level, there always seems to be more to uncover about this topic.

Struggling to State the Essential Understandings (Scenario)

When Nancy asked her partner, Judy, to provide feedback on her plan for an economics unit, Judy saw a listing of very engaging and diverse activities. Students were going to have opportunities to: do market research; set up their own businesses; create videos and songs for advertising campaigns; design their products; set up assembly lines for production; make posters and flowcharts showing their business plan; do reports on why businesses fail; read stories about other students who started their own businesses; figure interest on loans, etc.

Judy was genuinely impressed with the way Nancy had built in activities that addressed multiple learning preferences and styles. She had built in choices for keeping motivation high. What remained unclear were the central unifying ideas. What was Nancy trying to accomplish as a result of providing students with all of these wonderful activities?

The activities were balanced between learning basic information, practicing basic skills and applying these facts and skills to real-life situations.

- Judy: Nancy, I see fantastic potential for reaching any number of understandings with the activities you have designed. Do you want me to help clarify exactly what you want as the focus for this unit?*
- Nancy: What do you mean? I already know that I want my students to understand economic principles by the end of the unit.*
- Judy: Right, but since you cannot cover every economic principle in three weeks, which principles are you looking for exactly?*
- Nancy: Good question. I want students to understand how to set up a business.*
- Judy: What principle of setting up a business do you want them to understand?*
- Nancy: I want them to know that just having a good idea isn't enough; you have to address needs and wants of your customers to be successful.*
- Judy: So your essential understanding could be, "Entrepreneurs have to find opportunities to address the wants and needs of their clients." Does that match your grade level indicator in economics?*
- Nancy: Oops! Not exactly. Fourth-graders are supposed to concentrate on organizing resources and addressing the concept of taking risks to make a profit.*
- Judy: So if we started the sentence with "Students will understand that...", how would you finish the sentence using the fourth grade concepts?*
- Nancy: I guess I would say, "...that entrepreneurs face risks by believing no success is permanent, and no failure is final."*
- Judy: Sounds like a great motto for life in general, so we know it is truly a great essential understanding. How about the organization of resources part?*
- Nancy: Students need to understand that to start a business you need capital to get the resources you need and that there are many ways of doing that.*
- Judy: What ways do you want to emphasize?*
- Nancy: Bartering and establishing enough goodwill to get people to help you and getting loans. That part will coordinate with figuring percentages in math. So my second essential understanding will be "People get capital for starting business by using interpersonal skills as well as financial resources."*

Why is Teaching to Essential Understanding so Important?

1. Because it promotes maximum retention...

Making connections among skills and concepts that result in statements that serve as universal life lessons often takes practice and guided conversations like that of Nancy and Judy. It is time well spent because it helps us avoid assigning aimless activities with very light payoff in retention of material.

Depth of understanding comes when students see connections and relationships.

Experts' knowledge is organized... Their knowledge is not simply a list of facts and formulas that are relevant to the domain; instead, their knowledge is organized around core concepts, or "big ideas" that guide their thinking...

Bransford, et.al. *How People Learn*, p.24 (2000).

2. Because we have a lot to teach and so little time...

There is always more to teach than there is time to teach it well, so how do we sort? Although we must teach basic skills, it is critical to go deeper than that. But this kind of teaching takes time. Knowing where to put a period is not the only skill that makes a good writer, even though it is an important one. Making choices is one of the hardest parts of teaching but is critical to high student achievement. Choosing to do everything often results in poorer quality.

Once the key understandings have been clarified, it is easier for a teacher to decide on what to spend time focusing, what can be covered quickly and what needs to be eliminated.

3. Because it prevents "watering down" what students learn...

Another benefit of teaching to essential understandings is the guidance it gives for making accommodations and modifications. Carol Ann Tomlinson refers to trying to "differentiate fog" as an act of futility. To intelligently diversify and modify, we have to resist "fog" and carefully state our bottom-line targets that all students need to understand. The targets that are worthy of deep thought and study lend themselves to planning lessons for a variety of levels and styles and with a variety of options. This makes meeting the needs of struggling and talented learners with the same lesson design much more manageable. Clearly stating the essential understandings will guide teachers as they decide what accommodations and modifications to make for struggling learners.

If the use of an accommodation or level of modification* will be a barrier to achieving the essential understanding because it waters down the challenge and quality of the thinking on issues of lasting value, it is most likely not a good adaptation.*

**Accommodation - changes in how we get there: materials, timing, setting, scheduling.*

**Modification - changing the content students are expected to learn from grade-level expectations.*



Key C: Authentic Assessments

What is quality assessment?

When assessment data are used to determine what to do next to help the student achieve the target behaviors and understandings, the assessment is being used well.

Master teachers use a full range of assessments: observations, dialogue, work samples, tests, quizzes, prompts and performance measures.

We need to consider:

Pre-assessment – administered before instruction begins. Pre-assessment yields baseline data, and indicates where to start.

Formative assessment – “dip-sticking” – a check for growth along the way – often called progress monitoring.

Summative assessment – a check to see if all the pieces are still there and are able to be applied and explained.

What is authentic assessment?

Authentic and performance assessments allow teachers to see students’ thinking processes by challenging them beyond recall to application, refinement and reflection levels. The assessments should be designed so target indicators can be clearly observed, but at a variety of sophistication levels and using several different styles. They can be designed as one task or a series of smaller, related tasks that can be assessed in steps.

Authentic assessment measures students’ abilities to research, apply problem-solving and communicate with an audience. It should be so engaging that students would not want to miss it.

An example:

You are a poet hired to write a poem or song that will help other students remember to show respect for each other. After analyzing what made the five poems we studied so appealing, write your own poem, song or rap and explain how you used some of the same techniques in your creation. Select a grade level as your audience and explain how you adjusted your product to suit the age level, interest, etc. You may do this alone or with a partner as long as you can explain the techniques yourself. Include a visual to enhance your presentation.

If certain indicators do not lend themselves to an authentic assessment, teachers should attempt to design a performance assessment or an extended response prompt that matches the level of thinking required by Ohio’s statewide assessments.

What does an authentic assessment look like?

This kind of assessment often gives the student:

1. A **role**, an **audience** and a **product to be created**: “You are Little Bear’s best friend. Draw a picture story or put on a skit that shows Little Bear ...”
2. A **problem to solve** that often occurs in life: “Little Bear lost his favorite hat. Your story or skit must show at least four different ways you think Little Bear could look for his hat.”
3. **Criteria** you and the student will use to measure the quality of the assessment performance.

Who should be involved?

The teacher(s) can establish the product and criteria for judging the quality of the performance, either alone or in discussion with the students. Outside assessors, such as community members, are especially valuable for judging performance, if supplied with a rubric so they can give clear and focused feedback.

The criteria must reflect the skills and indicators of the unit and define the appropriate level of thinking targeted in the essential understanding statement.

How much time does it take?

The issue of time has a two-pronged meaning for assessment: one is time to design and the other is time to implement and score.

Start by thinking of great projects you have done in the past that can demonstrate this big idea and set of skills.

Instead of taking time away from instruction, formative assessments often replace many other less powerful assignments.

1. Design time may take a little longer than it takes to compose a test or quiz, depending upon teacher experience and how many team members are helping to brainstorm. Sometimes the assessment-designing step for a map requires a second meeting for review and completion. Assessments are refined each year.
2. Implementation time could range from part of one class period to several days, depending on the type of project chosen. Remember that this is generally a *formative* assessment from which the students learn as they work. Students are given feedback from peers and teachers and are expected to revise and improve their work before submitting it as a final product. An authentic assessment can serve as a learning activity and as a progress-monitoring tool at the same time.
3. Scoring time can be quick and easy or time-consuming, depending on how the teacher designs and implements the assessment. Evaluating can be done as the teacher observes and holds discussions with students as they think through the process in class. Clear rubrics also make scoring and feedback more efficient. Rubric scoring has the added advantage of allowing the students to do quality reflection on their own work. (See Key E: Range of Assessments, page 32.)

What materials do we need?

Often the enrichment and extension ideas in textbooks can be modified to create strong authentic assessments that match the essential understandings, indicators, skills and concepts on the map.

Suggested Resources

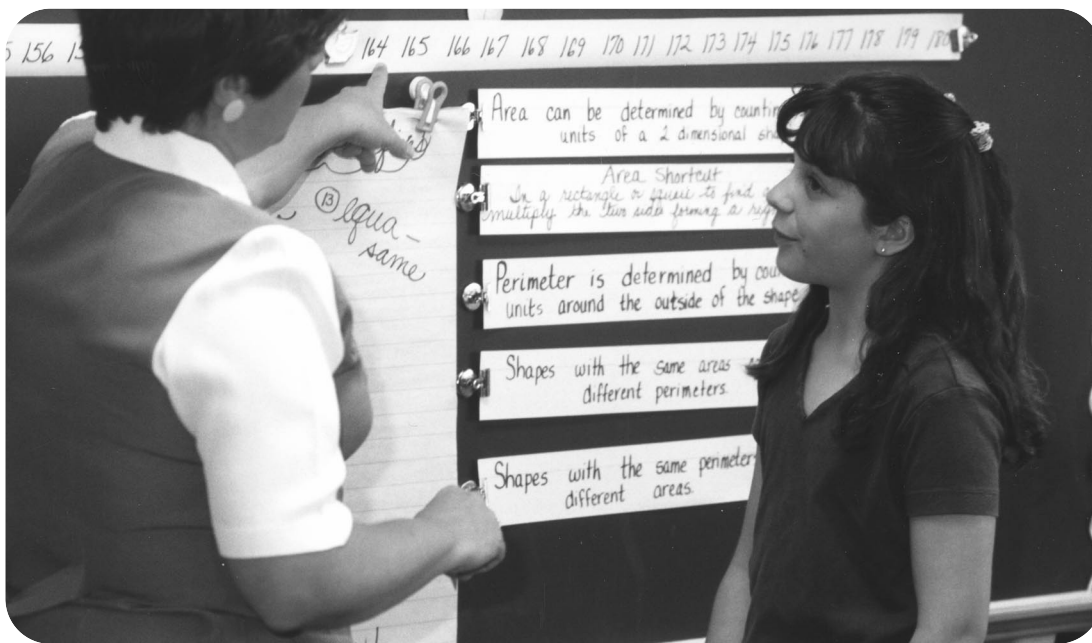
- Burke, Kay. *How to Assess Authentic Learning*. Skylight, 1999.
- Kallick, Bena. *TechPaths for Math*. Technology Pathways Corporation, 1998.
- Lewin, Larry, and Betty Jean Shoemaker. *Great Performances: Creating Classroom-Based Assessment Tasks*. Association for Supervision and Curriculum Development, 1998.
- McTighe, Jay, and Grant Wiggins. *Understanding by Design Handbook*. Association for Supervision and Curriculum Development, 1999.
- Stiggins, Richard. *Student-Involved Classroom Assessment*. Merrill Prentice Hall, 2001.
- Strong, Richard, et al. *Teaching What Matters Most*. Association for Supervision and Curriculum Development, 2001.
- Twomey Fosnot, Catherine, and Maarten Dolk. *Young Mathematicians At Work*. Heinemann, 2002.

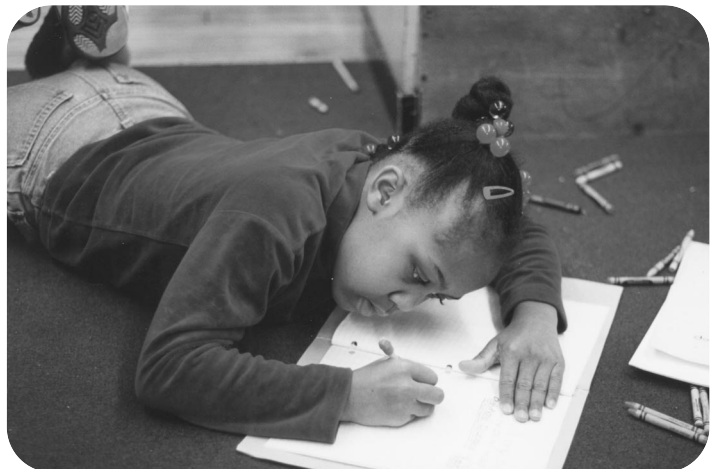
Web sites:

<http://www.Exemplars.com>

<http://www.Ohiorc.org>

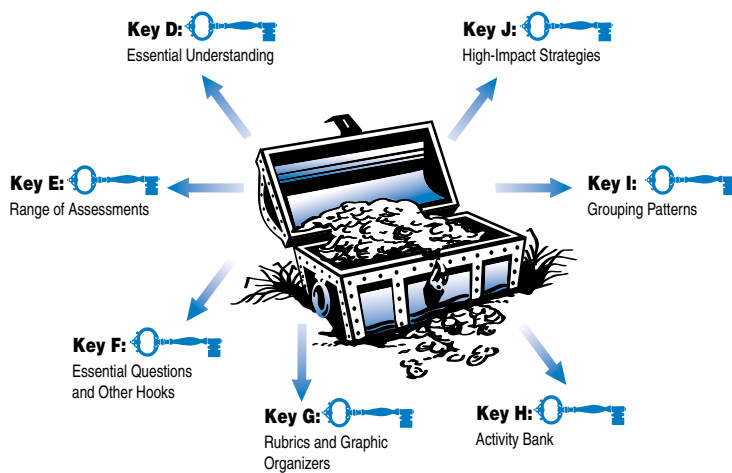
http://www.ode.state.oh.us/families/academic_standards/





Chapter 2: Standards-Based Instructional Design System

Essential Understanding



For decades we have played the “flavor of the year” game, working diligently to learn and implement the newest “silver bullet” developed to chase away low achievement skills. Master teachers quietly shake their heads and shoot their eyes heavenward as experts try to convince everyone that “this is the panacea.” Because students are so diverse, we need “diverse” tools and strategies to teach them. The truth is that when the first method of instruction leaves 10 students in the dark, great teachers try a second method. When there are still five students who do not get it, master teachers pull out technique number three... and so on. The more equipped a teacher is to anticipate and accommodate differences among students, the more successful the instruction. These teachers leave no child behind.

Chapter 1 outlined the concept of the assessment map, which serves as the basis for designing the quality lessons described in this chapter. Whether we call these units of study, differentiated units or simply lessons that meet the needs of all learners, the bottom line is that master teachers do quality planning. This chapter will describe how a teacher who would be capable of entering an Olympic-level teaching competition might describe what he or she would have to do to “Go for the Gold!”

Chapter 2 will describe steps to help teachers think through the process of:

- A. Designing a learning unit that anticipates and addresses student diversity;
- B. Developing powerful individual lessons;
- C. Setting up and managing multiple activities in the classroom;
- D. Selecting high-impact strategies.

Challenge:

You are one of the finalists in the “Olympic Teaching Competition” and you have decided to “go for the gold.” You have been assigned 26 very diverse students and you have one month to show what an Olympic-level teacher can do. Where would you begin?

Olympian: *First, I have to know what I am expected to teach. What do the students have to know and be able to do by the end of the month?*

Judge: *All finalists have the same fifth-grade geometry unit. Grade-level indicators surrounding 2-D and 3-D figures have been selected for you. You have one month to get every one of your very diverse students as close to mastery of the indicators as possible.*

Olympian: *In the athletic Olympics, the contestants know the exact assessment and the rubric the committee will use to judge performance. I’m hoping this competition is set up the same way. I really need to be able to focus in on the exact skills that count to have any chance of winning. Will I have that?*

Judge: *Yes, what you have to achieve and how it will be judged has all been spelled out for you, very specifically.*

Olympian: *Next, I need to know some things about the students personally so I can take every avenue possible to speed up the learning process.*

Judge: *Just what type of information do you need to find these avenues?*

What are the key skills, knowledge and practices most likely to result in an Olympic-level teaching performance in our standards-based world?

Teaching a Standards-based Unit to Diverse Learners

What is it?

A standards-based unit for diverse learners is a teaching plan that organizes powerful and focused learning activities and assessments around the grade-level indicators and essential understandings.

The design anticipates the diverse needs of the students in the class and creates a plan that is deep enough in scope to allow teachers to accommodate individual student needs.

What does it look like?

Standards-based units include:

1. A clear focus on just a few (one to 10) indicators, even if more are taught;
2. An essential understanding statement to guide the unit (Key B: Essential Understandings, page 17);
3. A range of assessments to gather evidence of student understanding before, during and after the learning process (Key E: Range of Assessments, page 32);
4. A list of key vocabulary to be stressed (page 57);

5. A variety of learning hooks to get and hold student attention and keep motivation high (Key F: Essential Questions and Other Hooks, page 39);
6. Various levels and strategies for teaching the activities:
 - a. Ways for students to learn the information and skills;
 - b. Ways for students to practice, rethink and refine;
 - c. Application activities;
 - d. Creative problem-solving activities;
 - e. Ways to accommodate and enrich;
 - f. Rubrics that can serve as models and be used to provide feedback for improvement (page 44).

Who is involved?

The teacher designs the draft alone or with partners. This draft is then reviewed by colleagues the teacher chooses. The review group helps the teacher to identify strengths and weakness of the plan. The group then recommends resources and activities that might enhance the quality and depth of the draft.

How much time does it take?

Depending on whether the teacher has taught this unit before and how many resource materials he/she has developed, this process could take from four to 10 hours. The review process takes 30 to 45 minutes.

If teams develop all or part of the unit by pooling ideas, the design time may be less and the ideas are typically much richer in quality.

Suggested Resources:

McTighe, Jay and Grant Wiggins. *Understanding by Design Handbook*. Association for Supervision and Curriculum Development, 1999.

Tomlinson, Carol Ann. *How to Differentiate Instruction in Mixed Ability Classrooms*. Association for Supervision and Curriculum Development, 2001.

Marzano, Robert, et al. *A Handbook for Classroom Instruction That Works*. Association for Supervision and Curriculum Development, 1999.

Harmin, Merrill. *Inspiring Active Learning: A Handbook for Teachers*. Association for Supervision and Curriculum Development, 1994.

Burke, Kay. *How to Assess Authentic Learning*. Skylight, 1999.

Reeves, Douglas B. *101 Questions and Answers about Standards, Assessment and Accountability*. Advanced Learning Press, 2001.

Web sites:

<http://www.Ohiorc.org>

http://www.ode.state.oh.us/families/academic_standards/



Key D: Connecting Essential Understandings and Authentic Assessments

Problem:

Many students have a hard time in school because teachers try to cover too many concepts at a time. There is often too much breadth and not enough depth.

In his book, How the Brain Learns (1995), Dr. David Sousa states that, “There is a hierarchy of response to sensory input. Any input that is perceived as higher priority diminishes the processing of data of lower priority.” So, if a series of pieces of information are presented during a lesson and they all appear to have equal value in the student’s eyes, serious mental interference occurs.

What can we do?

By focusing on a few things at a time, students can make better connections and therefore learn and remember more. It’s “pay me now or pay me later” with classroom time.

If teachers focus carefully on one major understanding and show how other information is related to it, the likelihood that students will be able to process larger amounts of data is increased. When we do not do a thorough job of teaching the first time, we find ourselves needing to re-teach. Here are some ways of helping students’ brains hold larger amounts of information in shorter amounts of time:

1. Talk about essential understandings instead of assuming connections are automatically seen. Refer to these statements at the beginning and end of each lesson. Struggling learners have difficulty making connections between different ideas, facts or concepts. This makes remembering very difficult.
2. Call attention to understandings by posting them in the room or by using essential questions posted as visual organizers for the ideas discussed.
3. Cluster grade-level indicators together in logical units so students see how they work together when applied to the problem-solving situations in authentic assessments. Post the indicators for the day in student language so students are aware of what skills they must learn during that lesson.
4. Link understandings to prior experiences of the students by using KWL (What I Know, What I Want to know, What I Learned) charts, personal stories, journal prompts (“Have you ever...”). This helps students see connections and enhances memory.

If your team has developed a standards-based assessment map, many hours of planning for your differentiated unit have already been accomplished. Simply organize the information on a planning template of your choice; for example, the Ohio Instructional Management System (IMS) template or the model on the following page.

Unit Topic – Cells

Essential Understanding: 1. All organisms must be able to obtain and use resources, grow, and reproduce. 2. Individual parts make up a system that is so interrelated that a malfunction of any one of the parts could break the whole system down. State Indicators: L1, L3, V4, WP5, WP16, R4 *	
Concepts: Key Ideas to Know 1. Structure and functions of cells 2. Basic needs of living things 3. Systems and their relationships	Key Skills: Be able to do – verbs 1. Classify 2. Take notes and summarize 3. Identify and explain 4. Create and label a model
Overall Authentic Assessment (from the map to be given by every teacher teaching this unit) Write a letter from one of your cells to your brain. Explain your job and how the system you are working in needs assistance because of a problem. Explain what is going on and the exact type of assistance you need. Create a model of both the cell and the system to use in your oral presentation.	
Pre-tests, tests, quizzes, journals, portfolios, small projects, self-assessments... 1. Pre-test: Label cell and any system of the body. 2. Quiz on cell structure. 3. Quiz on functions of cells. 4. Label digestive and reproductive systems. 5. Classify parts of cells by function. 6. Keep split page notes on lectures and Chapter 2. 7. Daily journal summaries of lectures and progress on project.	

* L1 = Life Science, Indicator 1; V4 = Vocabulary, Indicator 4; WP5 = Writing Process, Indicator 5;
 R4 – Reading, Indicator 4

Essential Questions: Are cells alive or not? How can you prove it? How is a cell like a factory? How do cells get energy? Why does trouble in one part of a system cause trouble in other parts?		Vocabulary: <table><tr><td>Cell</td><td>Cytoplasm</td><td>Endoplasm</td></tr><tr><td>System</td><td>Golgi Bodies</td><td>Ribosomes</td></tr><tr><td>Nucleus</td><td>Vacuole</td><td>Mitochondria</td></tr><tr><td>Membrane</td><td></td><td></td></tr></table>		Cell	Cytoplasm	Endoplasm	System	Golgi Bodies	Ribosomes	Nucleus	Vacuole	Mitochondria	Membrane		
Cell	Cytoplasm	Endoplasm													
System	Golgi Bodies	Ribosomes													
Nucleus	Vacuole	Mitochondria													
Membrane															
Learning Activities: • Take notes; • Read Chapter 1 and answer questions; • Watch and summarize the video; • Listen to the tape and compare it to the text; • Design flashcards with words, sentences and pictures as clues.	Practice Activities: • Do Computer Lesson 4; • Complete Worksheet 7; • Complete three puzzles in the science center; • Practice your vocabulary flashcards with a partner.	Rethinking Activities: • Write a song or rap about the main points of the lesson; • Design a bulletin board showing how each part affects the other; • Write a poem or analogy for one of the functions.	Create and Reflect: • Think of an invention that could solve one of the problems; • Create a model or diagram showing a cell of a new type of plant you developed. Explain.; • Plan/present a debate on cloning.												



Key E: Range of Assessments

- Interviewer:** *I am interested in knowing just where you start if you want to “win the gold.”*
- Olympian:** *I need to know some things about the students personally so I can make learning efficient for all of them. I need to ask myself questions about my students.*
- Interviewer:** *What kind of questions would you ask?*
- Olympian:** *Who learns more quickly by having it explained and who needs to talk it through to understand? Who needs to see material in print and who learns better with pictures and diagrams? Who needs to work through real-life problems and do it independently and who needs a group to model things and talk it over? Who responds to a more firm approach or a bit of competition and who needs a calm, guiding hand with a firm nudge? When I can answer these questions, I can avoid many “blind-alley” experiences.*
- Interviewer:** *Why bother with that? Why not just start teaching?*
- Olympian:** *The more motivated the kids are, the more quickly they learn. It would be short-sighted of me to assume that what motivates me would automatically motivate them. I will start with large-group instruction to present the information quickly and I won’t talk more than about seven minutes before I see that they are processing the information in some way.*
- Interviewer:** *When you say process information, what do you mean?*
- Olympian:** *I could have them restate to a partner what I have said, pause to take written and picture notes in their journals or have a small-group discussion or activity as a follow-up to my presentation.*
- Interviewer:** *Okay, but how will you decide exactly what needs to be taught?*
- Olympian:** *For this unit, I could use an activity that involves asking them to build a model and do a drawing on graph paper of a block picture that shows up on the overhead. I will know who knows the basics and who needs no practice at all by their responses. I won’t waste time teaching things they already know when time is such a precious commodity.*
- Interviewer:** *But you’ve already been told that the group has been selected to have a very wide range of abilities and backgrounds. Aren’t you going to have to start from scratch since some kids won’t have any background knowledge at all?*
- Olympian:** *If you signed up for a month-long seminar on interviewing and the range of experience in the seminar was wide, how would you feel if you had to start on page one?*

For great results, you have to learn to gather just enough information to tell you what your next teaching move should be and then do something about it.

Interviewer: I'd be out of there by day two.

Olympian: Just because kids are captive audiences doesn't mean they don't feel the same way. They could be "out of there" mentally by day two. I'm going for the gold here. I can't afford to have anyone bail on me because they are unduly frustrated or bored.

Interviewer: That sounds like an impossible task.

Olympian: Not really. It is what a great teacher does. It is hard work and requires good planning and management skills, but good teachers all over the world are doing it every day at some level of sophistication. It's a matter of:

- 1. Focusing on very specific learning targets (standards and essential understandings);*
- 2. Assessing where the students are in relation to that specific set of learning targets (pre-assessment);*
- 3. Providing the most efficient instruction and practice possible;*
- 4. Measuring as they learn to see how well the plan is working;*
- 5. Figuring out what to do for the students who didn't learn as a result of the plan.*

The biggest problem with novice teachers is they think they can skip steps two and five. The ones who just present, test and grade – No gold for them!



Problem:

Students who do not pay attention or who act bored are a major source of anxiety for teachers. According to Pat Wolfe in her book, Brain Matters (2001), this often happens because students are not able to make sense of incoming information. Our brains are pattern seekers, and if we cannot link new stimuli with previously learned information, our brains are programmed to discard the information as meaningless.

When the brain cannot make a connection with prior information, it subconsciously perceives material as boring and/or impossible to understand and decides not to continue processing it.
Pat Wolfe

What can we do?

Being aware of when this disconnect is happening with students is critical. The use of data from various types of formative (check as we go) assessments can help teachers know when continuing down the same instructional path is going to be fruitless or even counterproductive.

In his article, “Assessment For Learning” (2002), Rick Stiggins cites a 1998 research review by Black and William of Kings College, London.

“Upon pooling the information from 250 studies on the estimated effects of formative assessment on summative scores, they report positive effect sizes of between a half and a full standard deviation. That would lead to percentile gains of between 15 to 30 points or three or more grade equivalents. They also found that these improvements help low achievers more than any other students and so reduces the range of achievement while raising the achievement of all.”

The more a teacher avoids learning potholes before and during lessons, the more efficient and effective instruction can be. Using assessment data during and after the lesson to guide decisions about what is needed next reduces failures, as well as the need for so much re-teaching. There is little hope for struggling students if the teacher simply records a grade and proceeds as if he/she has fulfilled his/her responsibility by simply presenting material and giving assignments.

Types of assessments you will need:**Pre-assessments**

These are quick informal surveys that tell what prior knowledge the students possess, what they are especially interested in, how they best learn and what skills they use well or still need. At times, the assessment is so cleverly folded into the lesson that students are not aware that the teacher is assessing all of these things. At other times, the teacher may ask students to rate themselves or take a short quiz on a set of skills or information needed for the next series of lessons.

Pre-assessments are simple tools used to gather only useful information. Some examples of these pre-assessment tools are:

Pre-assessments should focus on just the information targeted for the unit as opposed to being massive diagnostic inventories that render so much information that half of it is too old and invalid by the time anyone can use it.

1. Thumbs up if you feel you know this well, thumbs sideways if you are not sure, thumbs down if you are not familiar with this at all.
2. Write individual responses on slates and hold them up.
3. Give a quick I like/don't like inventory during which students rate items or mark happy or sad faces if they are too young to read.
4. Ask students to answer one question on the front of an index card and write one question they have about the topic on the back.
5. Give interest or learning preference inventories quickly by having students show if they preferred one, two, three or four on a force-choice question.

Checkpoint Assessments

Checkpoint assessments are samples, tests, quizzes and portfolios that are used to decide if a student needs more or less instruction and practice. Some of these assessments will be graded and others will be sources of feedback.

Authentic Assessment

Students are asked to carry out a process, create a product and explain what they have learned as a result. Many application or creative activities can be turned into authentic assessments by making them working applications of the essential understanding and asking students to reflect on what was learned as a result of the experience. (See Authentic Assessments on pages 23-25)

Authentic assessments are used to evaluate student "thinking," but clearly describe the target behaviors we want to observe.

Journal Assessment

Journals provide quick and insightful ways of checking not only the understanding but also attitudes and interests of students. Unlike diaries, journals allow the students to report on what they have learned, how they feel about the learning and how they see themselves making use of this material in their own lives. Struggling learners benefit from the focusing, reflecting and short writing practices required by this method.

Journals can be used to:

1. Launch the lesson by connecting to prior knowledge;
2. Help students process information during the lesson by writing summaries, descriptions, examples or questions they have;

3. Help students connect ideas to prior learning by responding to questions and tasks such as:
 - a. "What does this remind you of?"
 - b. "Draw a picture of two examples of what we just talked about."
 - c. "What during last period connects to what we did today?"
 - d. "List the steps you used to solve that problem."
4. Help students reflect on understandings and evaluate processes, ideas or feelings during or at the end of a class;
5. Give students who process information slowly more time and varied opportunities to rethink the information.

Journals can be notebooks for older students. For younger students, use single sheets of paper with the prompts already designed.

Student: _____ Date: _____	
The most important thing I learned today in science was _____	If I put these ideas into a picture it would look like this _____
I would rate my group's work as _____ because _____	A question I still have is _____

Observation and discussion are the easiest and most reliable ways to assess student learning, styles, interests and attitudes. By watching the students work and by asking pointed questions, a teacher can make certain that reading and writing difficulties do not make capable students appear as though they do not understand the material. The reverse is also true. Students who are great "test-takers" sometimes appear to know more than they actually do.

Observation Assessments

Quick Check Technique

Once the teacher learns the technique, "Quick Check" is one of the easiest ways to do observation assessments. It simply requires walking around the classroom, and marking skill levels on a scale of one to four on index cards. There is a card for each student with four or five target behaviors listed. As students are working alone or in groups, the teacher rates each student on at least one criterion.

The biggest advantages of using this method are that:

1. Every student knows you are taking a personal interest in what he/she is doing;
2. You send a clear message about individual accountability even though the students may be working in groups to learn from each other. They know their individual Quick Check is going to come up several times a week;
3. Students who are confused are identified quickly while there is still time

Each day the goal is to visit as many students as possible for 15 - 60 seconds. Some days you may get around the entire room and some days you may only be able to assess three or four students.

to keep them from becoming frustrated;

4. Students who are ready for a challenge can be identified and given more appropriate material in place of the practice work still needed by other students.

Management tips	Avoid the temptation to stop and fix problems during “quick check” time.
For quick-check	Tutoring as you go will prevent you from gathering information from all students as frequently as you should.
.	At the end of the day, sort the cards based upon one target behavior. Students who score a “one” will need a five-to-seven minute mini-lesson soon. Students who score a “four” may need a mini-lesson to get them started on more challenging material.

Self-assessment can be a step in the right direction and can take many forms:

Self-Assessments

Students who see themselves as partners with the teacher in reflecting and collaborating are more likely to be motivated to accept responsibility for their own results.

1. Students can monitor their own progress and track their own performances for speed and accuracy (i.e., rate of reading, length of sentences written).
2. Students can use rubrics to score their own performance and compare their results with that of the teacher or a peer.
3. Students can reflect on their beliefs, interests and styles of learning (in journals or on surveys).
4. Young children can simply put a frown, straight or happy face in the upper right hand corner of each paper to let the teacher know if they believe they did a good job. Children can be amazingly accurate in their own self-assessments.
5. Students can look through a collection of past assignments to analyze strengths and weaknesses. This can be a real eye-opener for students.

Example:

- a. Using the skills and concepts from a given month’s assessment map, ask students to choose their three areas of strength.
- b. Ask students to search through a collection of this month’s work to find evidence that their analysis is true. The same process is used for three areas of weakness, then verified with work samples. From this analysis, the students set learning goals for themselves for the next four weeks. This analysis data can be used as a basis for student-led conferences.
6. Ask students to collect their best writing papers over a period of a week or two. At the end of that time, the students select their best work and

tell why they chose it. Students then set a goal for beating their personal best the next week. Bena Kallick (1998) tells this story...

A first-grader started out making marks that looked a little like letters the first week of school. The following week she actually made the letter "B" each day and was asked to pick her best one. She said her goal for the next week was to make two letters, and she did. Each week she decided to add a letter, or sometimes two. One day she decided to stop messing around with letters and make a word. Again, she set small goals of how many words she would write until her goal was finally nine words. The next week she selected a paper with only four words as her best work. When her teacher asked why she chose the four-word paper as her best when her goal had been nine words she replied, "Because now I know how to write those things." Confused, the teacher asked clarifying questions until she finally understood that "those things" were sentences. The wonderful leap of learning that many teachers would have never recognized became clear because the teacher encouraged self-reflection and mini-conferences.

Each type of assessment must serve the purpose of promoting student learning, as opposed to simply rendering a grade. When teachers think of assessment data as the primary guide to their daily planning, they have taken a major step toward knowing how to meet the needs of the wide range of students in any given class.





Key F: Essential Questions and Other Hooks

Novelty often serves as an “attention getter.” Our brains are programmed to pay attention to the unusual, the intense and the emotionally charged and ignore or monitor steady states (Sylwester, 1995). In our daily lessons, we cannot maintain a steady flow of new and bizarre stimuli and even if we could, once our brains get used to this steady flow, the new and bizarre stimuli eventually would be ignored, too. Effective teachers maintain student attention by beginning with unique and engaging ideas and activities to “startle” the brain into focus.

If students like what they are learning and can find ways of connecting new material to old neural patterns, attention can be maintained for longer periods of time.

What is an Essential Question?

Essential questions can serve two critical purposes. They clarify and frame the essential learning points and, at the same time, engage a student’s mind by posing a thought-provoking question.

Heidi Hayes Jacobs (1997) suggests that we use essential questions as organizers for a unit. Activities can be grouped using essential questions that are much like chapter headings in a book. In this way, teachers can avoid what Jacobs describes as the common “potpourri” problem (random assortment of well-intended activities with no structure). This also helps students see that various parts of lessons are connected.

What does an Essential Question look like?

Essential questions are used as prompts that lead to the essential understandings of the unit. If a math unit’s essential understanding is “we can describe and measure the same thing in many different ways,” some essential questions that lead to this understanding might be:

1. What is measurement?
2. How many ways are there to measure length and weight?
3. How would life be different if we could not measure things?

There are generally two to five essential questions for each unit. They should be posted in the room and referred to daily to help the students sort the important from the unimportant — a common problem for many learners.

Characteristics of good essential questions are:

1. They have no single or simple correct answer and always require an extended response;
2. They invite students to ask other “I wonder” questions;
3. They are stated in inviting “kid language” and never sound like textbook or quiz questions;
4. The answers to these questions spell out the most critical learning concepts of the unit;
5. They are powerful enough to require many activities and experiences to uncover the answer.

Who should be involved?

The designers of the unit create the questions and fellow teachers help refine them. It is a great idea to involve students in developing essential questions. Young children do this naturally when they ask questions such as, “Why do days get shorter? Why are those daisies white and yellow?” As they learn to “play the school game,” they ask fewer and fewer of these “I wonder” questions.

Encouraging students to appreciate and generate essential questions is a worthy goal for all teachers.

How much time does this take?

Like any other new skill, writing engaging questions may demand more time at first. After a while, the time will be close to that of generating other activities that are meant to hook and hold students.

What resources are needed?

A clear focus for the unit and a creative mind are all you need, but here are some excellent resource materials that also will help:

Jacobs, Heidi Hayes. *Mapping: The Big Picture*. Association for Supervision and Curriculum Development, 1997.

McTighe, Jay and Grant Wiggins. *Understanding by Design Handbook*. Association for Supervision and Curriculum Development, 1999.

Other Activities That Hook Student Interests

Capturing student attention is how quality instruction begins. The most perfectly planned unit in the world means nothing if the learners do not connect. To design a great hook, or as Madeline Hunter calls it, “to establish anticipatory set” (1982), here are some guidelines:

If you are not paying attention, there is a good chance you are not learning.

1. Tap into students’ prior experience so they can see how the new knowledge fits into their past and future everyday lives. This gives both sense and meaning to the new information.
2. Have students actively involved in the “hook” activity.
3. Make certain the hook has a direct link to what the students are to learn next.
4. Convince the students that this will be an emotionally safe and interesting learning experience. How a person feels about the learning situation determines the amount of attention devoted to it (Goleman, 1995).

Besides great essential questions, other suggestions for hooks are:

1. Read part of a story or show just enough of a clip of a video to pique interest.
2. Start with a KWL chart to generate questions of special interest to the class.
3. Have an opening simulation that ends with an essential question. For example, one teacher might argue the Civil War from a northern point of view and then from a southern viewpoint, ending with the question, “Was the Civil War a just war?”
4. Discuss a project in which the students will be involved later on in the unit. This creates motivation for students to pay attention to learn the skills they will need for the project. A rubric also helps students focus on what they will need later on in the unit.
5. Give students a mystery to solve that will require the use of unit skills and concepts.

The easiest way to generate effective hooks in the least amount of time is to give general or unit-specific interest inventories before you design lessons. This will help you make links to issues and activities you know are “hot buttons” for many students.





Key G: Rubrics and Other Graphic Organizers

Shawnda: *I read about how project-based assessments demand more of students and are fairer indicators of high-level learning for kids who have reading and writing problems, but I'm not sure I'm buying that idea. Also, projects are hard to grade and it seems like even though the kids work hard, I'm not sure projects show me what they know as well as paper-pencil tests do.*

Performance assessments take time to plan and time to implement. Use them only for the most important skills and concepts.

Olympian: *I know exactly what you mean. I had the same opinion at one time. I had creative ideas of interesting things for the kids to do, but the projects didn't really seem to go anywhere.*

Shawnda: *That's exactly what I concluded. Creative busywork. So what changed for you?*

Olympian: *Now I know that it is critical to have both creativity and quality evidence of learning. First, I keep a focus on just five or six important indicators to assess. Then I get a few teachers to help me brainstorm projects that would show evidence of those exact ideas and skills.*

Shawnda: *I don't think I could narrow it down to five or six indicators for a whole project.*

Olympian: *Actually, that is key to a successful assessment. It has to be focused. If you try to assess too much at once, the kids start getting confused, and their work shows it. Quality on six high-impact skills beats mediocre performance on 12 skills any day.*

Shawnda: *Are you using all performance assessments now?*

Olympian: *No, and I never will. Some issues can be assessed with less depth. Also, some ideas lend themselves to a performance assessment better than others. It would be tough to do a paper-pencil assessment on how to dance the Macarena. That needs to be a performance assessment.*

One distinct difference between high and low achieving students is the ability to form clear mental images about what is being learned. "What does quality look like?" is one image the students must have to produce quality work.

Shawnda: *Good point. So how do you grade these projects? It seems so subjective.*

Olympian: *I create a rubric by writing down exactly what a basic but acceptable project would look like. Next, I describe what qualities an ideal project would have. From there I decide what the key differences are and what projects would look like that lie between basic and ideal performances. It's tougher than you might think to be that clear, but it's worth the time. Your result is an exact image of what you expect. In fact, I create or find examples to show kids the differences between acceptable and great. Once they can see the models, they generally aim for "great" right from the start.*

- Shawnda:** *Seems like the kids would just copy the examples you give them.*
- Olympian:** *They probably would if the examples used the same project prompt. I use examples that can be scored with my rubric but are different from the actual project they will do.*
- Shawnda:** *When do you give the rubrics to the kids?*
- Olympian:** *As soon as I announce the project. In fact, we score several sample projects as a class so they get used to using the rubric as a guide. First, we score perfect samples and once they know what perfect looks like we start with less than perfect. We also make suggestions about how some of the weaker projects could become expert ones. They don't mind revising someone else's work and it helps them internalize the rubric criteria. It's the only way we have a chance at the gold!*

Problem #1:

Struggling learners seldom can respond to the question, "What could you do to improve this work?" They often believe students who get good grades get them because they are just "smarter," or that the teacher likes them better.

Many research studies indicate that some students believe they do not possess the ability to succeed at a task and that belief might actually cause them to sabotage their own success.

Marzano, 2001

What can we do?

Fortunately, other studies have revealed that students who are taught to see the relationship between effort and success increase their achievement. (Van Overwalle & De Metsenaere, 1990).

Rubrics help students in two ways: they provide a detailed picture of what quality looks like, and provide a clear plan for taking the mystery out of how to succeed. Modeling and practicing with rubrics shows students that knowing what to do and following through with a plan really pays off for them.

Problem #2:

Have you ever experienced this?

You are grading a set of extended-response papers and you finally find one that you think deserves a very high grade. As you continue through the pile of papers, you come to two other papers that make the original high-grade paper seem pale by comparison. Now you are sorry you used a red pen to mark that original high-grade paper, because it is clearly inferior to the other two.

Most of us have had this experience and it is clearly a case of not establishing the criteria for excellence before assigning the task. If we, as teachers, do not always know what constitutes excellence, how are the students to know? This is one of the main reasons for the wide discrepancies in grading from teacher to teacher and for confusion on the part of students.

What can we do?

Developing rubrics that are used consistently throughout the school district would be a good step, but it would only be the first step.

Organizing sessions during which teachers at a given grade level use a rubric to score the same sets of student work, discuss their rationales for interpretations and come to consensus on what quality really looks like, is what it takes to reach a consistently fair system that guides students from year to year. This process helps reduce confusion in students often caused by inconsistencies in expectations among teachers.

What is a rubric?

A rubric is a scoring guideline that clearly outlines the criteria for judging the quality of work. Unlike checklists that judge only whether the criteria are present or missing, a rubric provides a descriptive scale for various levels of performance.

Rubrics take the mystery out of grading by establishing consistent criteria for judging work. They also clarify expectations before assigning tasks to students. Just as Olympians are able to match their performances to the expectations of judges, rubrics allow students to assess their own work in a way that matches the teacher's way of thinking about quality.

What does a rubric look like?

Rubrics come in various formats but the two most common are:

1. A set of pictures, symbols or statements about essential criteria with numerical scales to rate each criterion on a continuum.

0 1 2 3 4	The first sentence tells what the paragraph is about.
0 1 2 3 4	All other sentences tell more about the first sentence.
0 1 2 3 4	The sentences are in logical order.
0 1 2 3 4	There are many interesting descriptive words.

This type of rubric requires modeling and whole-class scoring practice so that students are clear about what the difference between a rating of three and four might be.

2. A set of statements describing the range in the quality of work.

Criteria	Beginner	Getting Better	Very Good	Expert
Accuracy	2 Key ideas	3 Key ideas	4 Key ideas	All 5 Key ideas
Visuals	Has visual but is confusing	Visual matches presentation	Has both diagrams and pictures	Both diagrams and pictures grab attention

Rubrics can be generic or can be designed for a specific task or performance. They can have any number of levels of performance, but are most useful when limited to between three and five. They can be used to rate any number of criteria, but are less confusing to students when they are used to rate five to seven elements.

Who should be involved?

Involving students in the restatement or design of the rubric results in an instrument that is more likely to be understood and valued by the class.

The teacher designing the unit needs to decide what elements are most important to assess. This decision will be guided by the essential understanding and the indicators listed on the assessment map.

Caution: Teachers must make certain the elements describing performance emphasize the most critical elements to be learned.

Giving parents copies of rubrics helps them understand expectations for work at that grade level. Parents then have tools to help explain quality work to their children and can use these tools to reinforce the expectations.

How much time does it take?

Designing rubrics can be time-consuming (a rubric may take one to two hours to construct) but, once designed, can be used for years. The best result of rubric design is the reduction of re-teaching time. Students are more likely to produce a quality product if they have a clear idea of what quality looks like. Giving students anchor papers as models of each level assessed on a rubric helps students understand expectations even more quickly. Saving sample papers from prior years is the best and most efficient way to have a ready supply of anchors.

What resources do you need?

You will need perfect examples of the elements your rubric measures and a series of examples in which only one element is missing or weak. Students are much more willing to revise someone else's work, so these samples will help to model and involve students in practice-scoring and doing revisions of poor work.

The assessment map is the key to making certain you are designing a tool that assesses the most important standards-based skills and concepts.

Other Visual & Graphic Organizers

Here are other tools that students can use to get a clear mental picture of how things fit together, or that teachers can ask students to create to check for clear mental pictures:

1. Timelines that help students see sequences and relationships;
2. Webs that show relationships among concepts or parts of a story;
3. Visualization exercises that help students create clear mental images;
4. Plays, skits and pantomimes to clarify how pieces fit together;
5. Graphs, maps and charts that display data in a way that shows patterns;
6. Models, diagrams, puzzles, floor plans and flowcharts;
7. Drawings, illustrations, story boards and cartoons;
8. Split-page notes - written notes on one side and sketches or symbols on the other; and
9. Color-coding or highlighting notes, parts of speech, main ideas, etc.

Suggested Resources:

Armstrong, Thomas. *7 Kinds of Smart*. Plume/Penguin, 1993.

Burke, Kay. *How to Assess Authentic Learning*. Skylight, 1999.

Campbell, Linda and Bruce; and Dee Dickinson. *Teaching & Learning through Multiple Intelligences*. Allyn & Bacon, 1996.

Hyerle, David. *Visual Tools*. Association for Supervision and Curriculum Development, 1996.

Lewin, Larry, and Betty Jean Shoemaker. *Great Performances: Creating Classroom-Based Assessment Tasks*. Association for Supervision and Curriculum Development, 1998.

Marzano, Robert, et al. *A Handbook for Classroom Instruction that Works*. Association for Supervision and Curriculum Development, 2001.

Sousa, David A. *How the Brain Learns*. National Association of Secondary School Principals (NASSP), 1995.

Wolfe, Patricia. *Brain Matters*. Association for Supervision and Curriculum Development, 2001

Web sites:

www.inspiration.com



Key H: Activity Banks

- Jerome:** *Groups? Are you crazy? I don't do groups. I would never get through the book if I had to teach everyone in groups. Besides, the discipline goes south pretty fast when I'm paying attention to just a few kids at a time.*
- Olympian:** *Jerome, why give a pre-assessment if you plan to ignore the fact that the skills of the kids vary widely? Is there really a reason for the doctor to check to see what's wrong with you if the only medication he ever prescribed is aspirin?*
- Jerome:** *Cute. Are you saying my teaching has been giant doses of "aspirin" all these years?*
- Olympian:** *What I'm saying is that your lessons are just what the doctor ordered for most of your students but there are some who have enough science background to teach the lessons, and others who have no background or prior knowledge at all. You have a responsibility to all students. Your doctor has the responsibility to prescribe exactly what you need, and you, as his patient, expect medical knowledge and expertise. You deserve that kind of individual attention from your doctor, and these kids deserve it from you.*
- Jerome:** *So I can't teach the same lesson to the whole class?*
- Olympian:** *Sure, you can, but there have to be regular times where you tailor the assignments and/or instruction based on data from the kids. It may be that you take a few minutes at the end of class to re-teach something to a small group of students who need it. If groups scare you at this point, start with other types of accommodations. Perhaps the homework or in-class assignments are different, based on what you find out in the assessment data. Maybe the intervention specialist in the building can help with one or two groups on some days. There are many ways to address the needs. Even students explaining strategies to each other is a powerful way to do it. The point is that you know the differences are there. The question is: How are you going to respond to them?*

Problem:

It never comes as a shock that after we deliver our best teaching, there are some students who still do not learn what we want them to learn. This happens for a number of reasons, not the least of which relates to the preferred mode of learning.

Dr. David Sousa (1995) describes the problem this way. Although we use all five senses to collect information, they do not contribute equally to our knowledge base. Students with different sensory preferences will behave differently during learning. Strong auditory learners may feel comfortable with lecture and discussion while those students with a strong visual preference will doodle or look at other materials to satisfy their visual craving. If the teacher is primarily using a visual approach, the auditory learners will want to talk about their learning and the strong kinesthetic learners will become restless or find reasons to move. It would be a misinterpretation to assume any of these responses indicate inattention or are misbehaviors. They generally are natural responses of learners with strong preferences.

Cultural preferences add to the mix. Some students will regard schedules as important and others will not. Some will be very verbal and others reserved. Some are creative and others are analytical or reflective. Varying levels of skills and background add further complexity to the picture.

Silver, Strong and Perini, in their book, So Each May Learn: Integrating Learning Styles and Multiple Intelligences (2000), stress that learning styles are often ignored in the classroom. The authors argue that student achievement can improve markedly when learning styles are addressed.

What can we do?

To be as effective as possible, teachers must plan lessons that anticipate all learning styles as well as multiple achievement levels.

As assessment data points out student needs, the unit design should be developed to arm teachers with strategies to address varying needs. Not every style and level can be accommodated in every lesson, but over the course of a week, there needs to be an adequate balance of opportunities to ensure each student a reasonable chance of success.

What are Activity Banks?

Activity banks are both input and output activities that work on the same set of specific skills and concepts using a variety of levels of complexity and style. The more a teacher knows about the students, the easier it is to plan and select effective activities for them. Giving interest and style surveys help facilitate this process.

Having different versions of activities allows both the teacher and the students to select those that fit best without sacrificing quality of learning.

What do Activity Banks look like?

Level 1 – First, make a list of skills and concepts to be taught. Then, decide the best **ways to deliver this information** to the students, keeping in mind that some students struggle with reading and writing and others will learn better with visual or manipulative material. Keep in mind that the more involved a student is in the learning process, the more likely the student is to learn and retain the concepts being taught.

Level 1 ideas:

Lectures with notes	Textbook reading	Using graphic organizers
Video clips	Lab observations	Simulations
Audio tapes	Group discussions	Internet searches
Demonstrations	Songs and poems	Computer software

Level 2 – After listing all the strategies and resources that could be used for teaching the basic information in Level 1, plan a variety of **practice activities** that will reinforce and extend the material taught.

Level 2 ideas:

Summarize notes	Make a booklet	Work at a board
Practice flashcards	Lab partner work	Build a model or collage
Worksheets	Group discussions	Explain to a partner
Group problem-solving	Computer software	Design a display

It is suggested that once students grasp the ideas taught, more instructional time and energy be focused on having students apply what is learned than was spent on the initial understanding of them (Marzano, 2001). Spending more time on Level 3 and 4 activities is a shift in thinking for many educators.

Level 3 – Develop activities that require students to **rethink, refine and reorganize their learning by applying it** to outside-of-school problem-solving situations.

Level 3 ideas:

Lab investigations	Draw a cartoon of...
Rewrite an ending to a story	Give a dramatic presentation
Debate pros and cons	Evaluate the quality of...
Find articles that verify a position	Propose changes for...

Level 4 – Plan activities that **require research, reflection and creation of a unique product** to challenge student thinking at the higher levels.

Level 4 ideas:

After doing research on a topic:

- Write a play or skit that shows...
- Choose a current event issue and become the classroom expert on it.
- Design a 3-D version of...
- Write your own version of...

It is often helpful to code each planned activity to make certain that levels of difficulty and preferred styles of learning of students are considered. Teachers might use the chart below to code their activities.

W = Write	V = Visual	I = Independent
A = Auditory/listen	R = Read	G = Group
K = Kinesthetic/move	S = Speak	C = Student choice

Packaging Options:

Once a bank of activities is generated for various levels and styles, there are any number of ways to package and/or deliver them.

1. The teacher simply assigns the appropriate tasks to students each day as either in-class work or homework. The tasks are chosen based on assessment data indicating what would be most appropriate for each student.
2. Stations allow students to work on different tasks without burdening the teacher. Activities may be written on cards and posted in stations around the room with the materials needed to perform the tasks. Students move independently, or as groups, from station to station as the teacher monitors or conducts small group work. Students do not necessarily need to work at every station, nor do they have to do every assignment at every station. Some days the teacher decides who goes to which station, and what work will be done there; at other times, students will make these decisions. Often, color-coding or numbering task cards makes it easier for teachers to prescribe specific work for individuals or groups of students (i.e., Jonel will do all blue tasks in station three and five this week and any green task of her choosing). Students keep a log or journal of what they have accomplished each day.

<u>Kenton's Log</u>		August _____
Today I worked at the _____ station		
I finished task: ☺ ☹ ☹		
A	_____	
✓ B	_____	☺
C	_____	
D	_____	
Tomorrow I plan to finish <u>C and D</u>		



3. Contracts can be developed for each student using activities and tasks taken from the learning bank. Each student has the option of choosing activities that he or she will accomplish within a given amount of time. Activities are arranged in columns that reflect complexity levels. Below is an example of Morgan's contract. Morgan must choose activities that she will accomplish in one week. As shown, Morgan is required to accomplish all three starred tasks in Level 1. These three tasks would give Morgan 40 possible points. She then could choose to do other Level 1 activities, but the maximum number of points that she can earn through accomplishing tasks in this level is 60. Morgan must choose at least one activity from Level 2 and one from Level 3 that she will accomplish during the week.

Morgan's Contract		Checkpoint 1 _____ November 5	Checkpoint 2 _____ November 8
Information & Practice		Application/Rethink	Exhibit Understanding
Level 1 max 60 pts ★ Take picture notes in class daily (5 pts. daily X 5 days = 25 pts.) ★ Read pages 4 and 5 and do the worksheet (10 pts.) ☐ Do the investigation (5 pts.) ☐ Summarize the video (5 pts.) ★ Complete station activity 4 or 5 (5 pts.) ☐ Complete the computer lesson (10 pts.) ☐ Write a song about the three main ideas (10 pts.) ☐ Conduct an interview and report on... (10 pts.)	Level 2 15 pts each ☐ Plan a skit with a partner ☒ Design a bulletin board ☐ Build a model and explain ☒ Use a chart to compare... ☐ Write a story about... ☐ Explain to the teacher how you would solve... ☐ Create a flowchart...	Level 3 20 pts. Each ☒ Create a video or tape demonstrating how you would solve this problem ☐ Choose a character and tell the story of how you think he or she should have... ☒ Propose a new rule to solve one of our class problems ☐ Design and perform an experiment that shows...	
Total Possible Pts.: 40 Total Actual Pts.:	Total Possible Pts.: 30 Total Actual Pts.:	Total Possible Pts.: 40 Total Actual Pts.:	
★ = required	Choose at least 1 from each level	Pts. Means <u>possible points</u>	

Every activity on the contract or station must connect directly to the targeted indicator skills, concepts and understandings for the unit.

Morgan and her teacher have agreed that Morgan will try to earn a total of 100 points for the week. Morgan has chosen to accomplish only the required activities for Level 1, two Level 2 activities and two Level 3 activities. Morgan knows that choosing to accomplish activities that total more than her 100-point goal increases the likelihood that she will hit her target.

All students work at each level but not necessarily in the same way. The teacher and Calvin have agreed that he will try to earn 80 points during the week. Like Morgan, Calvin must complete the starred tasks in Level 1. He has chosen to do two more activities from Level 1, one from Level 2 and one from Level 3. Working to accomplish activities that carry 95 possible points increases the chance that Calvin will earn his 80 points by the end of the week.

Who should be involved?

The designing teacher should do the initial brainstorming and fellow teachers add to the wealth of resources and ideas. This creates a larger bag of strategies that might be options, even if the teacher ends up not using all of them.

All students are expected to be involved with tasks at all levels, regardless of their skill levels.

How much time does it take?

If the basic structure of understandings, essential questions and assessment with rubrics is in place, the target behaviors are so clear that designing the activities flows easily. However, much depends on the teacher's experience in designing activities that encourage students to use higher-order thinking, while considering learning preferences of all students. Asking a team to help brainstorm the options can add efficiency to this process.

What resources are needed?

Any activity that does not lead the students to the target behaviors is busywork and must be modified or discarded

The most important resources for teachers are the assessments, questions and understandings. These must guide the planning of the activities. If you know the target is clear, students are likely to hit the bulls-eye. McTighe and Wiggins refer to this process as "backwards design" (1998-99).

Other resources for activity ideas are textbooks and supplemental materials that have been selected to go with the course of study. The object of this type of planning is to eventually lighten the teacher's workload – not make it more burdensome. Teachers should use as many activities from past years and from texts as possible, while making certain they all match the target indicators.

Suggested Resources:

Campbell, Linda and Bruce; Linda and Dee Dickinson. *Teaching & Learning through Multiple Intelligences*. Allyn & Bacon, 1996.

Tomlinson, Carol Ann. *The Differentiated Classroom: Responding to the Needs of All Learners*. Association for Supervision and Curriculum Development, 1999.



Key I: Grouping Patterns

- Olympian:** *Jerome, let's go back to the statement you made about you not "doing groups." What keeps you from it when the research overwhelmingly shows how effective it is?*
- Jerome:** *Let me count the ways. First, it just takes too much class time.*
- Olympian:** *I have to admit that at first it is slow going, because you have to teach kids the routines and procedures, but once they learn them, it actually saves you time. Kids are more engaged in active learning. You can cover just as much content and it gives you a chance to assess more efficiently than calling on one student at a time.*
- Jerome:** *My observations are that one student ends up doing the lion's share of the work while the others happily ride along.*
- Olympian:** *That is more likely to happen if every student is not assigned a specific task and if the teacher doesn't hold each individual accountable for the learning.*
- Jerome:** *What kind of specific tasks are you talking about?*
- Olympian:** *I generally have one student leader, one scribe, one checker/material manager and one encourager. I like three and four-person groups for older kids. If there are too many students in a group, you are likely to get those passive members you mentioned.*
- Jerome:** *What do the checkers and encouragers do?*
- Olympian:** *The checker is in charge of seeing that everything on the rubric or checklist is accomplished. He/she also is the person in charge of getting and returning materials in perfect condition. If just one person is in charge, I find kids are much more careful with things. The encourager sees that everyone participates and contributes to the group. He/she is the one in charge of keeping the working relationships positive, giving feedback at the end of the meeting about what went well, and what the team needs to do to work more effectively.*
- Jerome:** *I'm not sure my kids would take their jobs seriously. They are a rowdy bunch this year.*
- Olympian:** *That's not an uncommon concern, Jerome. Start your groups by doing short activities in pairs until they get used to the procedures. That's how they start in primary school, and it works well with inexperienced older kids, too. Another thing you must do is model and practice the routines, roles and procedures. Use short group activities at first. Don't ever sit down during group time. Your job is to keep moving through the groups and ask questions, clarify tasks and give feedback.*
- Jerome:** *Sounds like a lot of work to me.*

The more carefully you teach the techniques, the fewer problems you will have. Group work has to be well-structured and monitored to be effective.

Olympian: *Every activity that pays big dividends requires work, but your work is up front to get things structured. Then, during class, the kids have to work harder than you do to solve problems, practice skills and work on projects while you move about, assessing their learning.*

Jerome: *That's another problem. I always hated the idea of getting a grade that was a result of somebody else's work or lack of it.*

Olympian: *We certainly agree on that one. Group grades are not fair unless the grade is for just using the group processes. I believe students can work in groups to practice skills and problem-solve, but I hold each of them accountable for academic learning. The kids never know who will be asked to report for the group. They all need to be ready to explain what their group has accomplished.*

Problem 1:

Novice teachers sometimes fall into the hole of assuming that just because the teacher knows the answers, the teacher should tell all the answers.

To quote Mark Twain, "If teaching were the same as telling, we would all be geniuses."

The "sage on the stage" syndrome leads to the undoing of many learners.

Students with learning

problems have a difficult time sitting and listening for long periods of time. They often process information more slowly and cannot make sense of it because too much is coming too fast.

Long periods of whole group instruction often result in a lack of understanding about what is being presented.

In his book How the Brain Learns (1995), Dr. Sousa explains that, "if the learner cannot attach sense or meaning and there is not sufficient time for processing, the new information will be lost. The more connections that are made, the more likely the material will be stored in different networks, thus increasing the likelihood of retrieval."

What helps?

Two interactive 20-minute lessons with group processing time built in are far more likely to result in improved retention than is one 40-minute lecture lesson. Listening, writing, talking and doing create multiple network connections for learners and increases retention of concepts.

Teachers who present information in short sound bites using a variety of approaches, followed by various chances for elaboration and rehearsal allow more processing time for students.

Problem 2:

Long periods of working independently tend to create problems for many high-risk learners. These students often need verbal interaction, cues to get them over tough spots, supervision to keep them focused and frequent feedback to keep them motivated.

What helps?

When given a difficult task, it is beneficial to hear the input and viewpoints of others. Hearing how other people think through problems, being able to verbalize your own views and getting frequent feedback are just three of the benefits of having students with academic problems work in heterogeneous groups regularly. We have to be careful, however, not to overdo this strategy or students will not get enough time to practice and reflect on their own.

There needs to be enough interaction to keep frustration from shutting down the learning, but not so much help that the student does not have to stretch and think for himself/herself.

A second caution is to avoid creating a caste-system within the room. Low-achieving students perform worse when they are assigned to homogeneous groups, (Lou, 1996). All students, regardless of ability, tend to benefit from heterogeneous grouping that is well-structured and activities and/or tasks that require higher-level thinking.

With younger or inexperienced students, grouping in pairs for short processing activities is a good way to begin. When working in pairs is learned, asking each pair to share with another pair is the next step.

With older or experienced students, groups of three to five can work well. Groups larger than five are not recommended, because when groups become too large, the chance that some students will not contribute is greater. Most of the time it is a good idea to assign students to groups to avoid tenuous personality combinations and to ensure a heterogeneous mix.

Here are some tips on managing groups:

1. Jobs should rotate and every student needs to be assigned a specific job.
2. The teacher needs to be circulating to monitor the work of each group, ask questions, clarify and give feedback. Students never know who will be asked to report for the group, so all must be ready to do so.
3. Have all the materials groups will need ready before class. One student is in charge of getting and returning all materials for the group.
4. Model and practice quality group routines and procedures on short activities before assigning complex tasks. Make the expectations clear as a bell.

5. Reflect on the group work at predetermined times during the session and reflect at the end of each work session on the quality of work and behavior. Set goals for improvement each time.
6. Students who disrupt the group become loners for the day. They must accomplish the work, but alone.
7. Grading is not based upon group products, but the ability of each student to show what he/she learned from the group work.
8. Change groups every four or five weeks.





Key J: High Impact Strategies for Struggling Learners

Modeling

Modeling first requires the teacher to demonstrate each step of a process, while the students follow along using a rubric or checklist. The next step is to ask the students to do a similar task while the teacher works with them, followed by working through the steps with a partner, and then finally alone.

Students should hear the teacher “think aloud” through the questions that they should be asking themselves, as well as options that they should be considering.

Chunking

Chunking shows students how one idea is linked or is similar to another and how it relates to other ideas in a category. Graphic organizers are very helpful and powerful tools to demonstrate chunking.

Vocabulary

A limited vocabulary is one of the most debilitating problems of low achievers. The least effective way to build strong vocabularies in students is to ask them to “Look up the definitions and study them.” A better way is to:

1. Have the students say new words aloud multiple times;
2. Make guesses about word meanings by using context, prior experience and other clues;
3. Paraphrase the dictionary definition and give examples of what words mean;
4. Use the words in conversation and in writing.

Select six to eight vocabulary words to emphasize for each unit of study. These should be the key words to which all other vocabulary can be linked.

Note Taking

1. Start lessons by having students jot down what they already know about the topic.
2. Several times throughout the lesson, have students pause and record in word and/or picture form what they have learned.
3. Have students record examples of ideas presented.
4. Ask students to share their notes with a partner and fill in any missing pieces. Then, give an open note quiz at the end of class or at the beginning of the next class. This process, quite frankly, forces students to review their notes at least three times, which is not a typical practice for low-achieving students.

Mental Rehearsals

Limit practice to the smallest amount of content that has the greatest meaning. At first, do daily practices in short, intense periods. Practice intermittently, but regularly, after the skill is learned well. Distributed practice over longer periods of time consolidates learning in a form that is likely to be remembered.

Elaborating

The more variety in the ways one refines and extends a skill or concept, the more effectively it can be recalled. The use of the following techniques will help students remember what they are learning: paraphrasing; note-taking with summaries; predicting and verifying the prediction; making meaningful associations; visualizing and verbalizing conclusions and summaries of what they are learning; applying to problem-solving situations; and creating something using the skills and concepts.

Summarizing

After a lesson or lesson segment, the teacher should tell the students that they have two minutes to write a sentence or to do an illustration of the most important thing they learned during class. This can be done in a journal or on a card that is handed to the teacher as they leave the class. They may list any questions they have on the back of the card.

Homework

Before assigning homework, the teacher should be quite certain the student has demonstrated an understanding of the skill to be practiced. What is practiced tends to be remembered. The purpose of homework is for students to *practice skills they have learned*.

Accommodating students who have difficulty even after all the best preventative techniques have been used

Make the smallest possible accommodation that gives each student a fair chance of being successful with the general education curriculum.

Some students' learning difficulties will require special accommodations to make the classroom a fair playing field for them. Most people would agree that asking a student with no use of his hands to write a paragraph would be cruel and unfair. We would naturally find a way for that student to show what he or she can do another way. Because some students' skill deficits or struggles are less obvious, it is sometimes difficult to know what accommodations are appropriate.

Not all students will be able to reach the same level of sophistication but they can all move closer to the grade-level indicators.

Some suggestions to consider that can be used as scaffolds for students are:

We do not want learned helplessness, nor do we want needless failure. We must not water down the curriculum, but build the scaffolding needed by students to reach the bar. Students must be taught in ways so that they can reach their highest potential.

Accommodations of time that allow the same work to be done successfully:

1. Do critical parts of assignment in school and finish at home or with a friend.
2. Allow several breaks as the work is being done.
3. Give additional practice or work time (more days, homework, study period).
4. Give some work early to prepare for the class (lesson on tape, parent pre-teach).
5. Give the same test, modify the time element and frequency of cues to help pace the student.
6. Give a step-by-step timeline or help the student create a pacing plan.
7. Ask students to set goals for how far they can get in four minutes, then another four.

Accommodations of difficulty that allow the same skills and concepts to be learned:

1. Show students samples of other students' quality work as models.
2. Reword texts and directions using simpler vocabulary and a limited number of concepts.
3. Have students paraphrase instructions or concepts in their own words before beginning.
4. Give notes or study guides for the lesson with key words missing and a word bank to help with spelling as they fill in the blanks.
5. Highlight the important words and concepts.
6. Use alternate materials with less detail or fewer steps.

Accommodations of support that allow the same work to be learned:

1. Work in a group or pair.
2. Use an open-book test or oral exam.
3. Give students a concept web or outline of material from which they can learn.
4. Hold skill groups or tutoring sessions between typical classes.
5. Practice with a reading buddy or read along using a tape of the reading assignment.
6. Use a computer, spellchecker, calculator or number line.
7. Design a second version of the test to accommodate learning problems.
8. Dictate responses to a student scribe or to a tape recorder.

Accommodations of size that maintain critical learning skills, but reduce work on less important items:

1. Circle the problems that are the “must do first.” Other problems can be optional.
2. Reduce the number of references, pages, topics or components, as long as this does not weaken the learning of critical skills and concepts.
3. Cut or redo the paper so pieces of the assignment are given at various times (do total assignment, but in chunks).
4. Do part of the assignment in writing and complete the rest orally.
5. Coordinate assignments with other teachers to avoid overloading.
6. Have students work a few problems and check in with you; repeat.
7. Write main ideas only, and then do the rest with a partner.
8. Give partial credit for the steps of a problem being solved, as opposed to giving credit for the answer only.

Grading: Just what is fair?

Many teachers worry about how to grade fairly when they have made accommodations for a student’s learning difficulties. They ask, “Is it fair to give Steven the same grade as Alicia when Steven had fewer tasks to complete and was permitted to tape his test response? Alicia had none of those accommodations.” Asking the following questions will help teachers with issues that involve grading:

The answer starts with another question: “What is the purpose of grades at your school?”

1. *Is it an accurate report of what the two students know in relation to the standards?*

If this is the purpose of lessons or assignments, then the teacher must ask if both students know the material. If the answer is “yes,” the way the teacher helped each get there is not the issue. The fact that both students had different ways of showing what they know is not the issue. The fact that they both met the learning goals is what counts. They both get the same grade if they meet the same expectations.

2. *Is it a report of student growth when measured against the starting point?*

If this is the purpose of grading, the teacher must know where each student began and ended in relation to the standards. Alicia may have begun knowing all the material and met the standard without really trying. Steven may have worked diligently and grown from knowing very little about the subject to meeting the standard at the same level as Alicia. If this is the case, Steven may deserve the higher grade because his growth was substantial. However, the teacher must keep in mind that Alicia very likely would have benefited from enrichment lessons or tasks that required her to learn beyond grade-level indicators.

3. *Is it a report of attitude, effort and responsibility?*

In this case, if both students turned in their homework, did all class assignments, participated in group discussions, turned things in on time and took good notes, what they ended up knowing on the test would not determine the grade. They would both receive the same mark.

If I grade on effort and/or growth and you grade on achievement, the same student could get a "D" from me and an "A" from you for the exact same performance.

It is easy to see that each scenario has merit. Some teachers lean toward one interpretation of the purpose of grading and others take a different approach. The grades often make perfect sense to the teacher, parents and student at the time, assuming the ground rules are clear from the start. The problem comes years later when people wonder how in the world this student got an "A" in math the first year and a "D" the next. If the teachers are not there to defend the logic behind these grades, the system appears to be illogical.

If issues like attendance, lack of homework completion and limited motivation affect a student's grade, they may disguise real performance. Grade inflation surfaces when teachers weigh effort more heavily than standards. Resisting the temptation to combine effort, growth and performance is highly recommended (Guskey & Bailey, 2001). Many schools have separate ways to grade for each of these elements.

When teachers base grades on a combination of performance, effort and growth, the interpretation of what a grade means becomes even murkier.

Research reveals that students who experience difficulty in school are seldom motivated by letter grades. Simply telling students that their answers are right or wrong also has a negative effect on their achievement.

Marzano, 2001

Of course, feedback has to be more than a letter grade or mark of correct/incorrect. The kind of feedback that makes the biggest difference in achievement involves the teacher telling students specifically what is accurate and inaccurate about their answers, and then giving them time to make corrections. Quality feedback must help a student know how to get better. Using a variety of feedback strategies (grades, conferences, rubrics, checklists) is more likely to help motivate struggling learners to keep trying.

It is strongly suggested that teachers do the following things to prevent problems often associated with "grades."

1. Have staff and parents come to consensus on the exact purpose of grading and reporting in your system.
2. Once the purpose is clear, decide what factors will and will not be used to determine the grades.
3. Put a bigger system than just letter-grade report cards in place to keep parents and students informed about all aspects of learning (newsletters, e-mail, conferences, public displays of great work, interim reports, etc.).
4. Consider a standards-based reporting system in which clusters of indicators are graded separately. This tells parents that Todd, who receives a "C in measurement," is passing, but has not met all the expectations in that category. He has a "B in patterns" and a "D in probability." This tells parents and students exactly where to put their efforts in the next few weeks. A simple grade of a "C" in math does not specifically guide learning activities (Reeves, 2001).

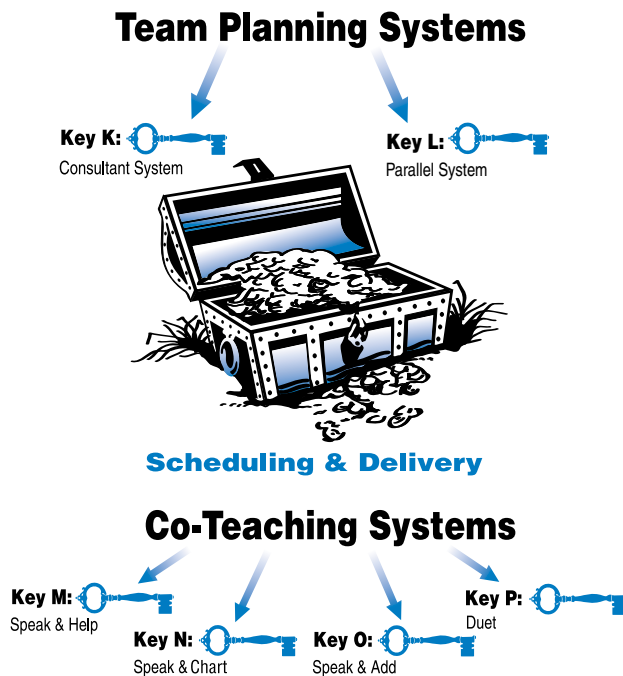
5. Give grades for effort that are separate from grades for growth toward the achievement of the standard.
6. Base the grades on what students know and are able to do in relation to the standards, not on the bell curve. If a student meets the rubric criteria for an “A,” the student gets the “A.”
7. Base achievement grades upon individual achievement – not group grades, not attitude, not attendance, not participation.
8. Do not include all scores in the final grade. Giving “zeros” for missing work or as a punishment, distorts the picture of what this student knows and is able to do. Find a different way (use a strategy that works) to encourage students to complete and turn in their assignments.
9. Use the most consistent and recent levels of achievement. If the student got off to a rocky start, the ending grade should not suffer if the student finally was able to hit the performance level.

Suggested Resource:

O'Connor, Ken and Richard Stiggins. *How to Grade For Learning*. Skylight, 2002.



Chapter 3: Standards-Based Scheduling and Delivery Systems



Key provisions of federal law involve:

- *Services that are provided so that students are successful in the general curriculum;*
- *Modifications and supports that are provided so that students are successful in the general curriculum;*
- *Students who are learning in the “Least Restrictive Environment;”*
- *Regular collaboration between general and special educators;*
- *Assessment that reflects full integration into standards-based reform.*

This chapter suggests six key ways faculty members can support one another as they strive to successfully deliver the standards-based instruction described in Chapter 2.

The consultant system is the basis for all other systems in that it is the team planning component. Parallel teaching extends the planning to include grouping students among teachers with assistance from paraprofessionals for instruction. The last four systems, shown above as Keys M – P, are co-teaching systems. Co-teaching involves two or more adults instructing in the same space. Reducing isolation among teachers is one of the major keys to success in increasing learning options for all “at-risk” students (whether or not they have identified disabilities). Collaboration systems make it easier for teachers to instruct students with IEPs in the “least restrictive environment” so that students with disabilities have more meaningful opportunities to access and make progress in the general curriculum.

Studies have revealed that there is a statistically significant relationship between school climate and student achievement. A healthy school climate is one in which teachers openly share their “failures” and mistakes, demonstrate respect for one another and constructively analyze and criticize practices and procedures.

(Fullen and Hargreaves, 1996; Deal and Peterson, 1990; Lortie, 1975)

Thinking through the options of how to use the staff more effectively

Kate, the principal, walks into the teachers' lounge and joins the conversation about how Joe, the classroom teacher, and Molly, the intervention specialist, can work together as they attempt to meet students' needs.

Joe: Well, Molly, I think that students with IEPs belong in an intervention room where they have a specialist to teach them. We aren't trained. These kids need a lot of individual attention. I can't give them that kind of attention in my math class, Kate.

Kate: Joe, I realize you can't give them much one-to-one help. If one-to-one help was all they needed, we wouldn't be scheduling them into your class. What all kids need, as much as an intervention specialist, is a strong math teacher presenting great lessons focused on the standards.

Joe: Well, Molly can do that in her resource room.

Kate: Actually, Molly can't do this alone; there are English/language arts, social studies and science standards to consider, in addition to standards for math. Molly is a learning specialist, not a math specialist and these kids need exposure to both.

Molly: I can provide specialized instruction, but my worry is that I'm not teaching the things kids need to know and be able to do so that they can pass the graduation test. I'm having a hard time getting a handle on all those new standards.

Kate: Joe, remember two years ago when we decided it would be a good idea to track classes? How did you like 4th period with a class of 18 "I don't like math" kids?

Joe: I hated it. My goal was to survive until fifth period. That's why I don't want Molly's job.

Kate: You teach the same number of high-risk kids now as you did that year. The difference now is that some have IEPs. It just works better when kids who are confused by math are taught with kids who have figured out how to get past the barriers. Kids learn from each other in a room where the teacher plans regular problem-solving conversations, like you do.

Joe: I know that.

Kate: If you know that, then why don't you think it works the same for kids with disabilities? Always teaching them with other kids who are having as much trouble as they are is one of the things that we should try to avoid. We know that this practice is not good for their learning, or for that matter, their feelings of self-worth.

Joe: Fine! I'll give you that one, but let me tell you a horror story. My sister teaches science in an "inclusion" school. She had a class of 20 eighth-graders who were joined by 12 kids with disabilities and their teacher. Thirty-two kids in that room and over half in academic trouble! The principal said, "But you have two teachers so that's a 16-to-1 ratio." That's what I have heard about "inclusion."

Kate: Joe, that's an example of poor administrative judgment. We know better than to load a class with lots of struggling learners, even if there are no kids with disabilities. Placing kids with IEPs strategically to keep the intervention staff from being spread too thin without overloading a classroom is tough, but we will do it.

Joe: So, if students with disabilities are scheduled into my room, is Molly coming with them?

- Molly: *If I have kids who can't handle the math without a lot of extra support, I will come in and co-teach with you. Many of my kids don't need to have me with them. All they need is a good teacher who makes appropriate accommodations.*
- Joe: *How am I supposed to know what to do with the ones you send alone?*
- Molly: *I will help you plan the accommodations. The accommodations we design together would be strategies you could use with many students in your class.*

Too much assistance is as bad as not enough.

The conversation in this lounge is not unlike those of many schools figuring out new approaches for meeting the needs of students. Classroom teachers and intervention specialists are afraid they lack the time and expertise to meet the challenges of struggling students. Administrators are having a hard time figuring out how to make schedules work. Parents and students are concerned that the “nest” of special education settings is disappearing, and fear that classroom teachers might not have enough knowledge or worse, be insensitive, to the needs of students with disabilities.

Although each of these concerns is legitimate, many schools have figured out how to reduce the risks and maximize the gains. This chapter is designed to share the strategies and beliefs that have made people successful in sharing the responsibilities.

The sooner we believe that ALL teachers are capable of assisting ALL students in their learning journey, the more successful we will be.

Beliefs that make schools successful:

1. Teachers who plan and work in teams will serve more students effectively than teachers who work in isolation.
2. General education teachers can deliver services to students with disabilities, with or without an intervention specialist present, depending upon student needs.
3. Intervention specialists and paraprofessionals can assist general education students who are struggling, provided that IEPs are implemented as written.

Services for meeting individual needs can be delivered by any person capable of delivering them, in any space and at the time most appropriate for the student.

Questions and Answers

What is teaming for standards-based instruction?

It is the pooling of all faculty talents to:

1. Meet the needs of every student who may be at risk for some things on some days;
2. Challenge students who are gifted or students who have already met grade-level indicators;
3. Meet the needs of all students;
4. See that “struggling learners” are challenged without undue frustration.

It is not:

1. Scheduling two teachers into rooms that need only one;
2. Paying attention to one group of students at the expense of others;
3. Tracking students to make teaching and scheduling easier;
4. Over-accommodating so that students do not learn what they need to learn;
5. Under-accommodating that makes learning a frustrating experience.

Strongly considering the following ideas is critical to success:

1. Schedule staff or students where the “fit” is best for maximum student learning – regardless of labels;
2. Understand that techniques, teachers’ groups and teachers’ roles may need to change in response to student performance;
3. Everything is negotiable – except the common set of standards and the accountability to ensure that all students work toward them.



Rachel Quenemoen, National Center on Educational Outcomes

What does teaming to deliver standards-based instruction look like?

Since the needs of students and the readiness of the staff vary from one situation to another, teaming can take a variety of forms. Every school will need the following components in order to effectively address what has been outlined in the assessment map:

1. Every teacher in the building consults regularly with a team to plan a wide range of alternatives to meet all levels of student needs.
2. Teams spend 80 percent of their meeting time analyzing and planning instructional strategies that lead to high achievement instead of focusing on issues that do not link directly to improving achievement outcomes for all students.
3. Scheduling of students and faculty is flexible to ensure that, as needs change, each student is in the best possible learning environment with the most appropriate people. (See Keys D-P.)
4. A full range of services is available for all students, from the most restrictive (student is alone with a tutor or teacher) to the least restrictive (student is learning with grade-level peers) and all the options in between. (See Keys K-P.)

Who should be involved in planning and teaching?

Every faculty member should be involved, but not necessarily in the same way. No one person can complete the job of leaving “no child behind” without other talented people who can help plan, assess and implement quality lessons.

Teams may consist of pairs of teachers, several grade-level teachers, teachers of different disciplines or teachers from different departments, depending upon the structure and size of the school. When assigning intervention specialists or tutors to teams, it generally works best to assign them to departments in high schools and to grade-level teams in elementary schools. Not all teams need to be structured the same way even within the same school, as long as each team focuses on consistent planning and assessing of standards-based instruction.

Typically, the administrator assigns faculty to teams, but it would be wise to make these assignments based on productive matches. Involving teams in the interview process to make recommendations about potential new members is a wise choice. This increases the team’s commitment to the success of the new member. The new member tends to feel more accepted, knowing the group selected him/her.

Not all teachers need to team-teach to be able to meet students’ needs, but every teacher needs to work with a team to plan options for addressing academic quality in every class.

Research by Friedkin and Slater (1994) indicates that best social friends do not necessarily work well together in teams, but matching people who are likely to build a basic respect for each other is essential to smooth-running teams.

When choosing or assigning teams, consider the following questions:

1. Does this match complement rather than mirror each member's strengths?
2. Are the styles, experiences and training diverse enough to help each member meet the needs of a wider range of students than could be done alone?
3. Are team members likely to argue frequently and engage in discussion that does not benefit the students if this match is made? If so, don't make the match!

How much time does it take?

Depending on the team option chosen, planning can take a minimum of one 30-minute session a week to a maximum of day-in day-out communication. The more planning time is effectively used, the fewer clock hours planning takes, and performance is greater. The first year is always labor-intensive, but improves quickly. (See "Finding the Time" on pages 87-88 and "Teaming Skills" on pages 80-84.)

Keeping the same teams together for three or four years is usually beneficial. This gives teams time to "fine-tune" and expand skills before moving on to new opportunities. Obviously, this "rule-of-thumb" has to be adjusted if the make-up of the student population indicates a change is needed before the end of this three- or four-year period.

What resources do we need?

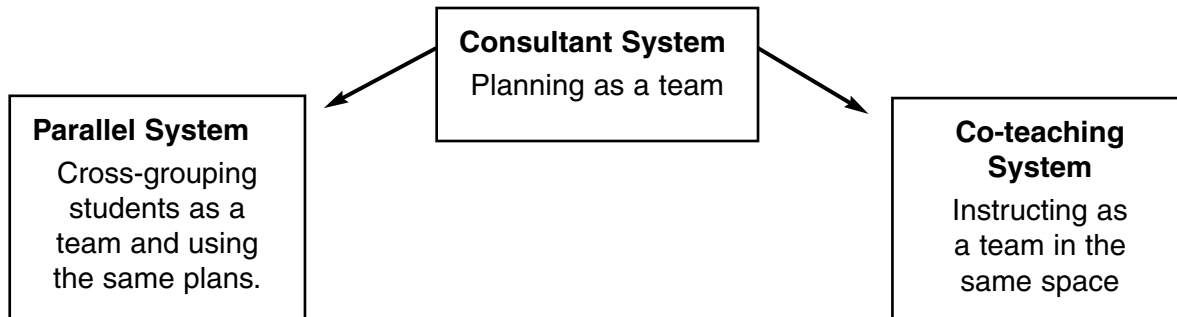
The most critical resource is **time**. Time is essential to share ideas and plan, to assess and revise and to implement the design. (See "Finding the Time" on pages 87-88 for specific ideas.)

Another resource is **training** in teaming and planning. Great teams have an ongoing process for developing teaming skills (i.e., efficient meetings, conflict resolution and problem-solving strategies). There are many programs that can help with this, but one of the most effective ways of learning what to do is visit a team that has solved the challenges many new teams face.

Most people say they do not have the time, but the truth is, people who are committed to working together make time to do what they believe is right.

Without administrative support and guidance, the job of teaming is doubly difficult.

A **supportive administration** is the third critical resource. Principals, supervisors and superintendents who set clear expectations, offer helpful suggestions, see that training is available and create schedules and room assignments that make planning and flexible scheduling possible are essential to the process.



Key K: Consultant System of Co-Planning

What is it?

Consultant planning can be used by teachers planning any type of instruction. An art teacher planning an interdisciplinary unit with a second-grade teacher makes as much sense as a reading specialist designing regular reading classes with a seventh-grade teacher. The consultant system involves two or more teachers who consistently meet to:

1. Share and plan units of study based on the assessment map for the grade level or course;
2. Design and grade assessments together;
3. Look at student data and design additional practice and enrichment activities or different teaching strategies/methods;
4. Share materials and the creation of accommodations for standards-based lesson designs;
5. Help each other focus on standards for all students and on specially designed instruction for those students who need intensive intervention.

The consultant system involves planning among several general education teachers, a group of intervention specialists or a combination of both, to act as resources for each other.

Paraprofessionals and tutors are included in the planning to increase the effectiveness of their support in classrooms.

This system is the backbone of all the other systems because its purpose is to expand learning options for every room in the school through team planning. It can be used as an *option* by *itself* if:

1. The teachers have never teamed before and/or have no desire to co-teach at this point;
2. All students can learn by having teachers plan together but deliver the lessons to their own groups (assuming that regrouping with students from another room is not necessary, nor is a second instructor required).

Here is a picture

Background:

Alice is a fifth-grade teacher with three students in her room who are struggling. Tamera and Daniel have had multifactored evaluations, but have not been identified as students with disabilities. Judy, for reasons unknown, seems “unmotivated.” Alice feels these students need more and her frustration level is rising.

Scheduling:

Jerome, the intervention specialist, has been assigned to the fifth- and sixth-grade teams to provide planning and intervention assistance to **ALL** students (consultant system). Each grade level has four general education teachers on the team. Jerome is responsible for 11 fifth- and sixth-grade students, some with identified specific learning disabilities, some with cognitive disabilities and some with emotional disabilities. Figuring out how to spend his time each day is a major problem.

Who goes to who's room?

Based on assessment results, Alice and Jerome have decided that one student with a cognitive disability and two with specific learning disabilities fit well with Alice's group. These students are able and willing to work on fifth-grade indicators with their peers, using the same types of accommodations as the three “at-risk” students in Alice's room.

Jerome's role:

Jerome's role is to help Alice design accommodations and help find appropriate materials. At first, Jerome and Alice decide only to plan together. Later, Jerome directly assists many students in Alice's room who need pre-teaching or intervention. This pre-teaching or intervention sometimes happens in Alice's room and sometimes in Jerome's. As they change from simply planning together to cross-grouping students, their system changes to the parallel teaching system.

Jerome and Alice look at assessment results and design interventions and/or groupings for any student in the class.

Here's How:

On Thursday afternoons, Jerome, Alice and Eric (another fifth-grade teacher) co-design lessons based upon the assessment map. The three teachers discuss options for helping all struggling students keep pace with the class. Some typical strategies are:

1. Redesigning worksheets to focus on only the key concepts from the standards;
2. Adjusting worksheet directions so that they are more straightforward, and adding graphics to provide more clarity;

3. Designing study guides, outlines or concept webs for some students;
4. Taping text for students who have reading difficulties;
5. Providing visuals for students to help them see relationships among concepts;
6. Providing “real life” examples and activities to help students see abstract ideas in perspective.

What about students who need resource rooms?

Jerome uses the jointly developed lesson plans for any students who will not typically be joining the regular classes. Jerome partners with another intervention specialist and a reading specialist to provide resource room services when he needs to be scheduled somewhere else.

Some of the time, students may need modifications or specially designed instruction that would not be reasonable to deliver in a general education classroom.

Jerome’s kids’ schedules:

The 11 students assigned to Jerome have been clustered in two of the four fifth-grade classes and two of the four sixth-grade classes.

- Three students are assigned to Alice on a regular basis with planning support from Jerome.
- Two are frequently taught in the resource room and in Eric’s fifth-grade classroom with Jerome’s in-class support.
- Two sixth-graders are in Beth’s class with only planning support.
- Four sixth-graders are in Sonja’s class with in-class support from Jerome or supervised assistance of the paraprofessional.
- Occasionally, Jerome will teach some of his students who need resource room instruction with Bill’s intervention class or with Rita’s Title I class to allow both Bill and Rita to do some in-class work with the general education teachers.

<u>Alice: Room 5-1</u> 28 students in classroom includes three of Jerome’s students – full-time for instruction without Jerome	<u>Eric: Room 5-2</u> 27 students in classroom includes two of Jerome’s students - part-time for instruction with Jerome	<u>Beth: Room 6-1</u> 28 students in classroom includes two of Jerome’s students – full-time for instruction without Jerome	<u>Sonja: Room 6-2</u> 26 students in classroom includes four of Jerome’s students – part-time for instruction with Jerome
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Clustering:

Jerome appreciates the care the principal has taken to ensure that all teachers share in the responsibility of teaching students with learning challenges. This not only takes students with disabilities into account, but other “at-risk” students as well. Four of the eight general classroom teachers have no students with disabilities, but are responsible for teaching a larger number of other students who are struggling.

Who does Jerome help?

Jerome and other specialists are included in the weekly planning for the grade level. Although Jerome gives and receives the same consultant support during team planning as the rest of the teachers, he typically has limited time to provide direct services to students in the four classrooms in which students with disabilities do not participate. The four classroom teachers and their students, however, benefit from Jerome’s consultation provided during weekly grade-level planning meetings. The option for extending services remains flexible as student needs change.

Tip:

Begin with a list of all certified and non-certified support personnel (i.e., intervention specialists, Title I teachers, tutors, paraprofessionals, literacy specialists). Assign these resource people so each team has concentrated service from someone who can help the team meet student needs, which allows intervention specialists to focus their attention on one team and have common planning time with the teachers on that team. All of the resource people need to maintain close contact with one another and share ideas and suggestions, as they will serve students with a variety of needs.

Scheduling students with disabilities in general education classes before assigning general education students to classrooms helps prevent potential conflicts and ensures quality services for all students.





Key L: Parallel Teaching System

While the consultant system is recommended for all teachers at all times because it ensures that teachers work in pairs or teams to plan, the parallel system extends the planning to a cross-grouping opportunity. This option may be used for all or part of a day, occasionally or daily.

What is it?

Teachers use the same instructional unit design described in Chapter 2, but deliver lessons in different ways to groups of students in one or more rooms. All teachers focus on the same essential understandings, indicators and assessments as identified on the assessment map. The two (or three) teachers then decide how to group the students and divide the teaching responsibilities.

How should we group students?

There are several choices for grouping in a parallel option. The one chosen depends on the purpose of the lesson. For maximum benefit, it is best to vary the types and structures of groups from lesson to lesson. Consider the following options:

1. *Interest groups:* The main purpose for interest grouping is to maintain motivation and attention of students. When students study what they already find interesting, motivation is less of an issue (e.g., “we are studying explorers; choose one on the list who interests you.”) Choices are limited to topics that fit the purpose of the lesson.
2. *Readiness or skill groups:* Students are grouped because they share the same needs for instruction (i.e., enrichment, practice, re-teaching of a specific skill). This is often an excellent choice for delivering specific interventions, but must be used cautiously. Slower progress can result due to lack of appropriate models for “at-risk” students and the belief that they “can’t” because they are the “low group.” Thus, skill grouping should be used to close the skill gaps as quickly as possible, so that students with skill deficits do not continue to demonstrate the need for intervention.
3. *Style groups:* Students who share favored ways of learning (i.e., auditory, visual, kinesthetic, concrete, abstract, competitive, cooperative), often work well together. At other times, a combination of styles may provide richer learning experiences.
4. *Random groups:* Gathering a variety of viewpoints or possibilities for problem-solving might best be accomplished by random groups. This gives students an opportunity to experience learning not considered in the other grouping patterns.

Over-emphasis of skill grouping can lead to in-class tracking, which often results in students sinking to the lowest common denominator.

Lowering expectations for a group often results in watering down and slowing down the curriculum, thus widening the gap that already exists.

What about tracking?

One group of administrators defined tracking as keeping any group of students together for more than eight days. Of course, this definition may not be a "research-based" definition of tracking, but it certainly helps teams stay flexible and understand the importance of the variety of grouping options.

Here's a picture of parallel teaching

- How it helps?*
- Bob:** *I have several struggling students in my third-period science class. I've done some intervention and what I'm trying isn't working. Think we could strike a deal? I could help you get a handle on the science standards and you could help me get through to the kids who do not receive special education services.*
- Molly:** *I think that could work well.*
- Bob:** *I heard that you can extend intervention services to any kids who need it as long as you see that the kids with IEPs are meeting their goals. Is that right?*
- Certification:*
- Molly:** *Yes, it is. Even though my certification does not really allow me to plan science lessons for general education kids without you, I can co-plan and co-teach with you.*
- The truth is, I have five students with specific learning disabilities who need to learn science concepts with their peers. I might have to pre-teach some concepts for a few of them, but I think it will be beneficial. In fact, you could send the students who are struggling to my room for the pre-teaching or I could do a pre-teach in your room.*
- Bob:** *I think Susan and Anthony would be reluctant to go to your room for help and their parents might have serious concerns about it. We'd better do this in my room.*
- In-room grouping:*
- Molly:** *What if you presented short lessons and then turned it over to me to break the kids into two task groups? I'll take one group and you take one. Putting me in a position of authority with mixed groups for a few days may take away the label as the "special" teacher. I'll have a better chance of being able to help everyone that way. It will also help the kids with disabilities feel less self-conscious about having me in there.*
- Bob:** *Are you saying we shouldn't group by skill needs?*
- Molly:** *I recommend that we start grouping by interest or even randomly, until we get over that stigma hurdle. Later, we can group for skills, because we both know skill groups can benefit our students.*
- Bob:** *I'm seeing this partnership as having more potential than I had expected. I didn't realize you would share the responsibility for teaching general education students with me.*

- Parallel in multiple rooms:*
- Molly:** *Actually, if I look like any other science teacher, students will accept my help without reluctance, including the ones who have IEPs. Chances are, the accommodations your kids need will be similar to the ones I'll be making for the students who also receive specially designed instruction. The added bonus is I get to see a science expert teach to the standards, so when I help kids I will have a better idea of what's expected.*
- Bob:** *Sounds like a win-win to me!*
- Molly:** *After we are comfortable with this step, we can consider setting up a study lab in the resource room as another option.*
- Bob:** *How does that work?*
- Molly:** *Projects, study assignments, computer work and skill groups can be scheduled in my room for application of the concepts being learned in your room. We will schedule some kids, and others can have drop-in privileges for working in the lab when their presence is not required for a class lecture. That option will have to wait, however, until everyone is comfortable with my new role as the study-lab teacher.*

Here's another picture of parallel teaching, but this time, without an intervention specialist as a partner

- Background:* Donna and Juanita teach second grade in a school with 12 general education teachers and Erin, the only intervention specialist. They believe parallel teaching will help them find more time to intervene with students who are not meeting indicators. Erin provides consultant-planning services to students, so the two second-grade teachers decide to try parallel teaching on their own for a 75-minute period each morning.
- Planning:* Donna and Juanita use the indicators from their assessment maps as a basis for planning. They will both focus on an integrated weather unit that includes the science, math and language indicators that involve observing, measuring, recording, predicting and drawing conclusions.
- Consultant:* They design the assessments, rubrics and activities together and get additional ideas from Erin. Erin will gather some picture books and tapes for the children who are struggling with reading. She will also create study guides for students who need step-by-step directions.

Scheduling:

Every day from 9 to 10:15 a.m., Donna and Juanita use parallel teaching. Classes go back to their regular schedule for the rest of the day.

During the first three days, Donna teaches demonstration lessons and provides practice exercises on measurement skills with Class A. Juanita engages Class B in conducting investigations involving measuring and recording wind speed, rain and temperature. After three days, they switch classes and repeat the same lessons for the opposite class.

Donna – Measurement Skills

9:00 – 9:35	Class A
9:40 – 10:15	Class B

Juanita – Lab Skills

9:00 – 9:35	Class B
9:40 – 10:15	Class A

Job Descriptions:

During the next seven days, Donna's job becomes one of instructor. For 35 minutes, she teaches skills, making use of data collected during Juanita's class, now referred to as the lab (i.e., adding and subtracting temperatures, writing observations in the journal, recording the rain data on a graph, drawing conclusions and making weather predictions from the observations and patterns). Donna does formal lessons using textbooks, demonstrations and lecture/response formats.

Extension and interventions:

When students go to the lab during the last 35 minutes of the session, they use the skills taught by Donna to practice and/or collect the information assigned for the next day's lesson. Juanita's job is to coach as she moves around the room helping and explaining the tasks to students who have difficulty remembering what Donna explained. Juanita often replaces the original assignment with more challenging work for students who demonstrate that they don't need as much practice. She also pulls groups of students together for mini-lessons when she or Donna identify students who need re-teaching or different teaching strategies or methods to learn concepts.

At times, the teachers start class with a double-class lesson and then divide the group into two or three subgroups. One teacher may move her skill group to another room to provide more space and keep the noise level to a minimum. If noise and space are not problems, they may teach two groups in the same room while a third group is working on an independent assignment. This choice decreases wasted time required by moving from room to room.

This option has many variations in terms of number and types of teachers working together, places where instruction is delivered, and ways to group the students.

Parallel teaching gives students opportunities to hear the same concepts coming from two (or more) teachers using different styles and materials. Teachers often decide to take turns in instructing and coaching. This method gives both teachers the opportunity to gain experience with both types of roles.



Keys M, N, O and P: Four Variations of the Co-Teaching System



Key M: Speak and Help

The biggest advantage of this option is the rapid collection of data by a trained professional. With two teachers in the room, it is fairly easy to use on-the-spot assessment to determine levels of student achievement and what the teachers need to do to respond. Data-driven decision-making is the hallmark of standards-based teaching.

In “Speak and Help,” one teacher presents and the other informally assesses by recording responses during class, watching how well students begin assignments, listening to how well they work in pairs or groups and checking for understanding during independent work time.

Tip:

It is important for the helping partner not to distract students by talking or walking around when they should be listening. It is just as important for the speaking partner to limit the lectures to short (six-14 minute) sessions followed by group discussions or practice exercises so the helping partner has the opportunity to assess student thinking.



Key N: Speak and Chart

“Speak and Chart” is a particularly strong model for teachers who are unaccustomed to working together, especially if one partner feels unsure about the content. This option also can be used with paraprofessionals or with students as the charting partner.

In “Speak and Chart,” one teacher presents the material in a verbal format, while the second teacher presents visually. The visual presentation can be done in several ways. A few ideas would be:

1. Modeling note-taking on the board or overhead;
2. Creating a concept web to point out relationships;
3. Demonstrating a science investigation;
4. Modeling the steps by working problems on the board;
5. Recording student responses for all to see;
6. Acting out the concepts.

The biggest advantage to this option is that students have auditory and visual input. This option also models for students, “how” to take notes in a variety of ways.

Tip:

The charting teacher also will use fading with this procedure. Drawing blanks where key words need to be inserted begins to encourage students to do more than just watch and copy. As students become more proficient, the blanks become longer until they no longer rely on the teacher as the primary note-taker.

Kindergarten and first-grade students’ notes tend to take the form of pictures and rebus sentences, but older students should benefit greatly from this note-taking system as well.



Key O: Speak and Add

With this model, one teacher presents the key ideas as the second teacher gives examples, stories or jokes that reinforce the key points. Another option is for one teacher to read a textbook version and the second teacher to read a condensed version of a story.

“Speak and Add” gives both teachers a chance to monitor student responses as the partner teacher presents.

The “add” partner may have the same subject matter expertise as the “present” partner, but it is not essential in this model. It is essential that teachers working together develop rapport and have time to design a well-planned lesson.

The strength of this model is that students hear changes of voice, pitch and pace during lessons. This helps sustain student attention to information presented verbally.



Key P: Duet

Both teachers are responsible for teaching parts of the lesson. One teacher may present study skills, while the other delivers the content requiring the use of these study skills.

Example:

- Carlo is the reading intervention specialist. He will be co-teaching with Ron, who is the social studies teacher. Carlo begins the instruction by modeling and explaining how to take split-page notes.
- Ron teaches the first half of his lesson within nine minutes. He stops and turns instruction back to Carlo.
- Carlo asks the students to stop taking notes on the left side of the page and concentrate on creating webs or illustrations on the right side of the page that summarize the written notes. This forces the students to rethink what Ron has presented. Students then quickly compare notes and illustrations with a partner, which gives them another opportunity to fine-tune their understanding.
- Ron completes the second part of his presentation.
- Carlo repeats the “illustrate and compare” strategy and prompts the students to write a summary statement for the lesson at the bottom of the page.
- Ron announces that tomorrow’s class will begin with an open-note quiz, which will, again, require students to re-read and review their notes.

This example takes advantage of the strengths of both teachers, while demonstrating the application of study skills in context. Duet is the most complex version of co-teaching. Like the “Speak and Add” option, both teachers must have rapport that allows an easy flow of “give and take” as they teach together. This flow does not happen unless teachers have time to create an organized plan for the lesson. Duet does not work for all co-teaching teams. It is often easier for teachers to begin with “Speak and Help” and “Speak and Chart,” before they move to “Duet.”

Most teaching teams quickly come to the conclusion that a combination of all the key systems makes sense. Whatever options teachers use, all models require pre-planning and attention to grade-level indicators. Each format is much more likely to help faculty meet student needs than systems that keep teachers in isolation.

Role of Paraprofessionals

Care must be taken in assigning tasks to paraprofessionals. Recently, guidance has been offered that helps educators avoid the “traps” often associated with paraprofessional assignments to students (Giangreco, 2003).

Overuse of paraprofessionals can have the following pitfalls:

1. Teachers can become overly-dependent on someone else to do much of the work.
2. The paraprofessional becomes a “substitute” for a certified or licensed teacher.
3. The service becomes difficult to discontinue, even if the student is not improving as a result of the service.
4. Students become “prompt-dependent” or specific person-dependent.
5. Constant “caretaking” of a single student can be embarrassing to the student and gives the impression to peers that the student is helpless.

Suggestion guidelines for assigning one-to-one paraprofessionals:

1. Focus on classroom paraprofessionals instead of one-to-one assignments.
2. Ensure that paraprofessionals stay close to single students only when it is necessary.
3. Paraprofessionals should be involved with assisting many students in the classroom to decrease the possibility that the student will become dependent, and to prevent the “stigma” often associated with paraprofessional assistance.
4. Keep paraprofessionals involved in the planning to take full advantage of the skills they may bring.
5. Remember that if paraprofessionals are not certified teachers, they may not be assigned the responsibility of planning instruction.
6. Include paraprofessionals in professional development activities.
7. Establish criteria that can be used to track student growth in independence and record data to support findings.
8. Assign one-to-one services with a specific start date, a phase-out plan and an ending date.
9. Ensure that one-to-one is provided only at times and in places where it is needed, and include this information in the student’s individual plan.
10. Assign the paraprofessional to the student for no more than two years to avoid personal dependency issues.



Teaming Skills

With any of these options for collaborative work, the potential is great, but the power remains dormant unless there is an atmosphere of respect and professionalism. According to Fullen and Hargreaves (1996), to be effective, team members must support one another by:

1. Openly sharing failures and mistakes;
2. Demonstrating respect for each other;
3. Tactfully and constructively analyzing and criticizing practices and procedures.

By starting with an agreed-upon assessment map, many of the basic decisions about what will be taught have already been decided (Chapter 1). Teachers working together as a design team to plan units of study that account for student diversity is a powerful strategy (Chapter 2). What remains is the discussion of roles, responsibilities and procedures for working as a team to deliver the instruction.

Spot the dysfunctional behaviors in this scenario:

Karen: I think we need to discuss the fact that our team meetings haven't started on time once this month.

Jay: You're not going to get yourself upset about a few minutes now and then, are you?

Karen: I wouldn't be upset if it were only now and then. It started out being three or four minutes and now we're consistently five or six minutes late.

Betty: This isn't so bad. I worked on the fourth-grade team last year and you want to talk about late meetings...

Karen: I didn't say we were the only ones with problems. I just want to get this resolved.

Jay: I guess we'll just have to start charging a quarter every time someone is late for a meeting. Here, I'll put in a dollar in advance to take care of the next four meetings, just in case.

Karen: Very funny!

The good thing about this conversation is that the team members did not totally ignore or deny the fact that there were problems. The key dysfunctional behaviors in this scenario are poor listening skills and lack of advance agreements about roles, responsibilities and procedures. This kind of problem can be avoided with the development of good communication skills.

Communication

Reflective listening is key to effective problem-solving and quality communication. The best advice for good listening is to:

1. Avoid making interfering statements when someone needs to make a point (i.e., judging, disagreeing, joking, threatening, “I did that and it was worse than your situation” stories, advising or blaming). Interfering statements generally tell the speaker that you have stopped listening and have taken the spotlight from them.
2. Be sure the speaker knows that you understand the problem before you try to solve it. Paraphrase what you think the speaker meant both with his words and with his non-verbal cues. Wait until the speaker acknowledges that you are “on target” before continuing with your side of the conversation.
3. Ask clarifying or probing questions in ways that keep the speaker in control of the conversation. Be careful that questions are not sarcastic or are really statements in question form. (“You certainly don’t mean that, do you?” is most likely a judgment – not a true question.)

The reflective listening should bring focus to group issues and actions, not put you and your ideas in the limelight.

If these three guidelines had been followed, the previous conversation might have gone more like this:

Karen: *I think we need to discuss the fact that our team meetings haven’t started on time once this month.*

Jay: *You are upset about starting late.*

Karen: *Well, upset may be a little strong. I guess you might say I’m concerned that we are wasting team time and it seems to be getting worse.*

Betty: *You’re right. None of us has time to waste waiting for meetings to start.*

Karen: *I am not implying that there aren’t good reasons for people coming in late. I just think we need to talk about how we can change this pattern. Do we need to meet at a different time? Do we need to make a firmer commitment to being here on time? Should we just not wait for people who are late and proceed with the agenda? We need to brainstorm solutions and come up with a plan.*

Betty: *I agree. It’s not about pointing fingers, just fixing the problem of wasted time. That seems reasonable even if it is going to be difficult to solve.*

Unmanaged conflict happens when people are harder on each other than they are on the problem.

By allowing a distraught member to continue to hold the “spotlight” until he/she can fully express the problem, the team is more likely to avoid unmanaged conflict.

Resolving Conflict

Being honest about troublesome issues, as Karen was, takes real courage. The fact that she could freely speak about these issues said a lot about the integrity of the team members. She obviously felt safe to express an unpopular option without fear of retribution. Team members who learn to trust each other are ones who solve problems constructively.

Having disagreements is a natural, even essential, part of being on a high-performing team.

Having concerns and refusing to discuss them *with the people who are directly involved and can change these issues* is destructive to the team. A good ground rule is:

People who have concerns must talk directly to the people who have the power to solve these concerns. If a team member talks to someone other than the persons involved, that person should ask, "Have you already talked to ____? If not, when are you planning to do so?"

Talking behind other team members' backs solves nothing and generally undermines trust among team members. Taking part in this type of conversation is just as bad as starting it. If you are not part of the solution, you are part of the problem.

It is also destructive to the problem-solving situation by using defensive or avoiding behaviors as demonstrated in the first dialogue.

Ways to Reduce Conflict

A good way to begin a relationship is to set rules before anyone has a chance to be an offending party. Here is a suggested strategy:

1. Each person makes a list of "pet peeves" about working in a team. Such a list might include: arriving late for meetings constantly, leaving coffee cups around the work area, telling stories about how you worked on another team, getting off-task during a work session, etc.
2. The team then designs a set of rules to avoid potential problems. The rules should address:
 - a. How the meeting will be planned, scheduled and reported;
 - b. How the meeting and team roles and responsibilities will be assigned;
 - c. How classrooms or planning areas will be made to feel more like common space than "my room, my stuff – your room, your stuff;"
 - d. How personal space and furniture will be assigned to each member;
 - e. Which materials and supplies are common property and which are not;
 - f. How the team will keep meeting space reasonably clean;
 - g. What meeting behaviors will, and will not, serve the team well;
 - h. How conflicts will be resolved;
 - i. What decision-making processes will be used.

Suggested universal “codes of conduct” for team members:

1. Listen with an open mind.
2. When problems arise, seek suggestions from team members and outside sources.
3. Speak honestly and with candor.
4. Come to closure on team decisions and support them as your own.
5. Never make another team member feel inferior, even if there is a problem.
6. Give sincere and deserved observations and suggestions about each other’s work.
7. Address conflict with an individual directly, constructively and confidentially.
8. Share the leadership position with other team members.
9. Spend most of your team time on solutions instead of “admiring the problems.”
10. If nothing can be done about a problem, help each other cope and work around it.
11. Call each other on violations of any agreed-upon rules.

Common Pitfalls of Beginning Co-Teachers in Sorting Out Roles

The major complaints of intervention specialists when they first begin working in general education rooms are:

1. I am being treated as if I am the teacher’s assistant;
2. I am asked to design accommodations on the spot;
3. I don’t know what we are doing until I walk in the door;
4. The classroom teacher wants to call all the shots;
5. The classroom teacher lectures most of the time so there is nothing for me to do.

The major complaints general education teachers tend to express about intervention specialists are:

1. He/she just sits in the back of the room while I teach;
2. He/she probably doesn’t have time to do anything that requires planning, so I just let him/her provide a “bandage” approach for kids who are having trouble when they are doing seatwork;
3. He/she is constantly interrupting me when I am trying to teach a lesson.

Too much or too little initiative is a problem either way. In her book, *Interactions: Collaboration Skills for School Professionals* (2002), Marilyn Friend offers some conversation starters to avoid misunderstandings. Administrators should encourage teachers to talk about these topics:

1. Describe your ideal situation in terms of your role and my role as we co-teach;
2. Describe your idea of an ideal teacher or team for co-teaching (if you think 45-minute lectures are great and he/she thinks the investigation method is the only way, you have some “meeting in the middle” to do);
3. Describe jobs you would hate and which jobs you would really enjoy;

4. Describe your favorite topics and skills to teach;
5. Describe the greatest strengths you bring to this team;
6. Describe your biggest flaws that I should be aware of to help avoid problems or misunderstandings;
7. Describe help you would like from me as we begin this teaming relationship;
8. Discuss whether both teachers' names should be on the door and on newsletters;
9. Discuss procedures for classroom management that we can agree to use;
10. Discuss how much noise and movement each person can tolerate;
11. Discuss how free each teacher is to "chime in" as lessons are being presented;
12. Discuss how parent calls, conferences or complaints will be handled;
13. Discuss what the basic classroom rules will be;
14. Discuss what the standards are for an excellent writing paper at our grade level;
15. Discuss how we will share grading responsibilities. (Note that both teachers must be responsible for the evaluation of the student work or the students will perceive only one person as the "real teacher.")

Agreeing on roles and rules is important to a working relationship, but establishing and maintaining trust is critical. Both teachers must contribute equally, but not necessarily in the same way. How teachers define "equal" is up to them, but if one defines and the other simply complies, there will be trouble ahead. Administrators play a key role in encouraging discussion around roles and rules for co-teaching.

Leadership that Empowers Teams

Identify the leaders' attitudes and practices that could demoralize faculty teams in the following scenario:

- Nancy: *I feel like the weight of the world is on my shoulders since the last set of scores was published. Central office is really on my case.*
- Ernie: *I know. My scores were even worse than yours and the staff is blaming the kids and their parents. It really is difficult to teach kids whose parents can't or won't help, but we have kids from homes where the parents are very involved and some of these kids are failing, too. When I mention this, the staff seems to get even more defensive.*
- Nancy: *Been there, done that. I really have good people. Some are great, but they seem to be dragging themselves through the days lately. Pep talks work for a short time. Grafton District even tried paying incentives, but that had limited results and about broke the bank.*
- Ernie: *The problem is what's going on at Conquest School. They have gained between five and nine points for the last three years running and their community is just like ours. I don't know how they're doing that!*

- Bernice: They must have a far better staff. Mine were bolting for the door 10 minutes after the kids were gone until I started the sign-in policy. I really hit the ceiling one afternoon when an irate parent came in to talk to a teacher who had left five minutes early. What kind of professionalism is it when people are counting down the days to every vacation and retirement date?*
- Ernie: Lots of our “lounge talk” is about the “count-down to Friday,” but I have to admit that I feel that way too many days. The problem I find even more disturbing is the teachers know the state test is based on the standards, but many of them are still going page-by-page through the textbook or teaching old units that aren’t in their course of study. If they think that this way is so effective, why are our scores down? I think we need one textbook series and a weekly pacing guide like some districts have and personally make sure the teachers follow it. That’s the only way to get some of these people on board.*
- Bernice: I have to agree that if they all go off in their own direction, it creates a mess for the kids. Those teachers who are really talented at making resource material match the standards hate being tied to a pacing guide, but we can’t very well say that some have to follow it and others don’t. Grievances will be filed for sure.*
- Ernie: It’s a shame to set policies like your sign-in procedure because of a few offenders. You probably ticked off the whole staff because of the actions of the five or six repeat offenders and 10 others who would back them if you dared to call them on it. We have to be fair and treat everyone the same, just like the teachers have to do in their classrooms.*
- Nancy: I really feel like there are some better ways of improving achievement than creating more bureaucracy. One of my teachers has a friend who teaches at Conquest and she said they have an intervention period every day. I’m considering doing that in my building next semester.*

Although these administrators are well-intentioned and concerned about the students, the problematic thinking in this conversation will probably do more harm than good. These solutions are most likely creating as many problems as they are solving because:

1. When leaders think of significant school problems as their responsibility to solve alone, staffs tend to feel that their input doesn’t matter;
2. Focusing on problems and “who is to blame” tends to bring out defensive behaviors and excuses for poor results;
3. Leaders who buy into the idea that “we can’t make a difference” promote feelings of helplessness and justify the reluctance to change;
4. Leaders who commiserate with each other about problems tend to reinforce their own feelings of helplessness and justify their own reluctance to focus on solutions instead of the problems;
5. Creating universal rules and procedures to fix the problems of a few fosters feelings of resentment;
6. Bureaucratic fixes to problems open the door to sentiments such as “if it doesn’t work, it’s not my problem;”

7. Leaders who don't encourage people to solve their own problems by providing the necessary time and resources set the stage for apathy and indifference;
8. Leaders who take credit for ideas and successes of others spawn feelings of resentment and distrust.

The bottom line is, whether you are the principal, superintendent or teacher leader, your actions and reactions set a tone and send a message about who owns the power. You either energize or demoralize teams through the choices you make as you address problems.

Demoralizing Messages	Energizing Messages
1. I am in control here. 2. Be quiet and do as you are told. 3. The buck stops on my desk so I have the last word. 4. The scores and looking good are the main goals here. 5. If you fail, we'll find out who's to blame.	1. We can solve things by working together. 2. Your job and your opinions are valued here. 3. We share responsibility so we will "win or lose" together. 4. We will set clear, specific goals to improve student achievement and hold ourselves accountable for them. 5. We will admit mistakes and help each other find new solutions.

Great leaders encourage others to be responsible for solving their own problems, but are careful and skillful as they turn power over to teams that are at an adequate stage of readiness.

*Beginning Teams	Novice Teams	Advanced Teams	Expert Teams
Generally need help defining the problems, setting team goals and deciding how to monitor progress	Need a balance of direction and encouragement as the going gets tough	Need less direction and more feedback about results	Need feedback as well as new challenges to tackle

See Situational Leadership by Ken Blanchard (1987)

The best advice for both leaders and team members is to intentionally send massive amounts of what Dr. William Purky, author of *Invitational Learning*, visualizes as "Blue Cards." These are things we do and say and the environment we develop that makes people feel welcome and respected. At the same time, everyone must reduce the number of "Orange Cards" that flow. "Orange Cards" represent the things we say and do that are hurtful and make people feel alone or dishonored.

Since all of our influence depends on how "blue" our bank accounts are, we want to maintain the "bluest" environment possible. Every "orange card" takes away 12 "blue cards." Knowing this helps us better understand both adults and children who seem uncooperative. Maybe it is an "orange account" that is causing the problem. We may have to make the first "blue card" move to "mend fences" or to "build a bridge" to cooperation.

The only time you get to coast is when you are going downhill. None of us can afford that.

Finding the Time

The universal complaint of most teams is the lack of time they have to do all the things that need to be done. Unfortunately, there is no single method to solve this dilemma, but there are some ideas that have been implemented with success in many schools:

1. Schedule common planning time by sending the entire group of students to fine and applied arts at the same time (i.e., art, music, physical education, health, band and computer);
2. Use district inservice days for team planning (note that if there have been abuses of this time in the past, a product of the team planning time might be requested for team members to show evidence that this time was used effectively);
3. Use early releases or delayed start times to develop curricular plans;
4. Have a team of floating subs who move from team to team every hour or so;
5. Hold monthly assemblies that part of the staff supervises, while other teams plan;
6. Arrange for “Big Buddy” classes (e.g., first and fourth grade) that meet once a month for a joint class where the fourth-grade team conducts the classes, while the first-grade team meets. The next month, they switch;
7. Plan a strategy similar to the “Big Buddy” system, but schedule joint field trips where one grade hosts the trip, while the other grade plans;
8. Agree to “banked” time. If the teacher day is 15 minutes before and after the study day, agree to meet for 30 minutes on Monday in return for leaving 15 minutes earlier on Friday;
9. One district contracted for three inservice days during which teachers who agreed to take advantage of this opportunity were paid \$20 per hour. This provided money and time for committees, grade levels and departments to meet outside the school day or school year.

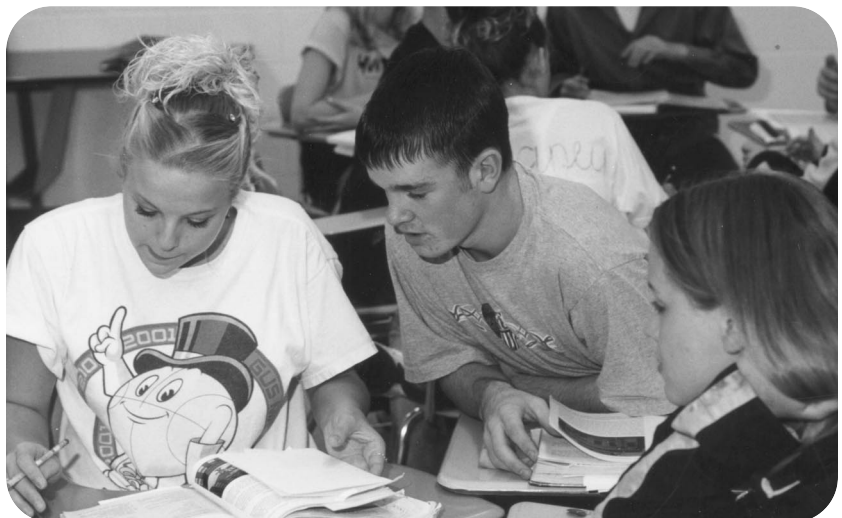
Typically, teams who truly are dedicated to working together can figure out a variety of ways to schedule the time. In most cases, it is not that the time cannot be scheduled, it's that people do not choose to use their time this way.

Another way to gain time is to use the time you have more efficiently. Many teams save a great deal of time by:

1. Beginning and ending meetings promptly as scheduled;
2. Having a specific agenda for each meeting;
3. Posting the agenda several days before the meeting so people come prepared;
4. Organizing a timed agenda (each agenda item has a specific number of minutes that is strictly adhered to, thus keeping the meeting moving and on target);
5. Taking minutes, thereby, avoiding miscommunication and conflict;
6. Assigning roles and responsibilities to each team member during meetings (i.e., task master, timekeeper, recorder, critical friend, peacemaker, process observer);

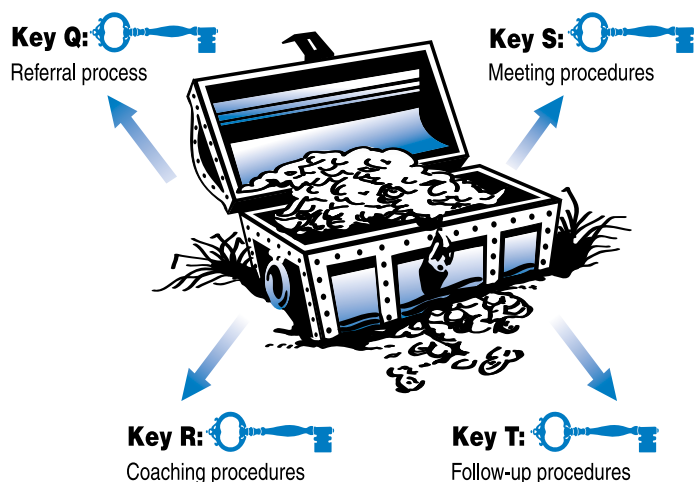
7. Keeping track of what percentage of each meeting is spent on planning and assessing students' work. This percentage should be about 80 percent. Student management, discipline and team "housekeeping" issues should not take more than 20 percent of the meeting time;
8. Ending by processing the effectiveness of the team meeting and setting an improvement goal for the next time.

It is wise to look for ways to get time by holding to these three basic criteria as much as possible: (1) keep it to minimal or no extra cost; (2) keep the kids in school; (3) don't interfere with any more instructional time than absolutely necessary.



Chapter 4: Standards-Based Intervention Assistance Teams

Trouble-shooting Systems



“We can, wherever and whenever we choose, successfully teach all children whose schooling is of interest to us. We already know more than we need to do that. Whether we do it must finally depend on how we feel about the fact that we haven’t so far.”

*Ron Edmonds (1979)
Harvard Graduate School of
Education*

Katie Bartlett has spent all of her 17 years exceeding the expectations the world placed on her when she was born with Down syndrome. Still, no one was quite sure what would happen when Bartlett took the MCAS exam, now a requirement for a high school diploma in Massachusetts.

This is what happened: She passed.

Article in the Boston Globe (December 22, 2002)

In Chapter 1, the assessment map – the annual plan for implementing and assessing the curriculum standards – was explained. In Chapter 2, teams were shown using the assessment map to plan differentiated units of study designed in anticipation of the diversity in learners. In Chapter 3, a plan was developed for collaboration to enable teachers to deliver quality instruction in efficient and effective ways. In Chapter 4, we look at procedures and strategies that add an additional layer of resources for teams that are not able to address some students’ individual needs within their own team, even with quality planning and delivery options.

Students like Katie Bartlett may need a team to brainstorm options and help her teachers monitor the types of interventions that will help her become successful. Intervention Assistance Teams (IATs) are support systems for parents, students and staff.

Teacher's Perspective:

Carl has been struggling with reading and writing all year. His difficulties are greater this year than last. He struggles to read the science, social studies and math books. The literature book adds to his extreme frustration. The boy is failing and becoming more of a "motivation" problem by the day. He is about 20 assignments behind and has nothing but F's and D's for the quarter.

I referred him to the IAT, a system designed to frustrate and infuriate. The committee of people I respect under different circumstances asked me what interventions I had used. I was tempted to say, "Why, nothing!! I was waiting to hear what you wanted me to do!", but I decided to be nice.

They then proceeded to list a bunch of "interventions" that I know won't make a bit of difference, but will create, for me, a lot more work. One suggestion was, "Give him an assignment notebook, which you and the mother check every day." Now that's going to solve his reading and writing difficulties and motivation problems!

I need to have him tested and placed in special education quickly or we might lose him completely. I just don't know how to teach him. I'm out of ideas. His mom seems worried, but I still don't see her making him do all of his homework. I wish she cared as much about her son's education as I do.

Principal's Perspective:

Sally is a good teacher and I know she's not the kind of person who just wants to make Carl someone else's responsibility, but I can't understand why she seems to be "bucking" the system on this IAT thing. She can't seem to understand that Carl is one of 18 cases the IAT has to process. We are only one team and have only so much time to devote to this. It's going to take some time.

She became very angry when we asked her to complete the referral package and then supply some baseline data. She thinks it's just "bureaucratic bunk." She doesn't seem to get the picture here. There are laws and potential lawsuits I have to keep in mind for all of our sakes.

She seemed downright hostile when the IAT gave her some interventions to try. Somehow it surprises me that she displays such negativity. If we put every kid referred to IAT into special education, 50 percent of our student population would have IEPs!

Sometimes, I wonder if it's all worth it myself. Only the IAT members seem to think this process is a good one, and sometimes, I'm sure even they wonder. It takes tons of time, tons of paper and just delays the testing process. We know we'll end up referring for testing anyway. Why don't we just cut to the chase?

Parent's Perspective:

I am worried sick about Carl. He and I are at odds almost every night over doing his homework. He struggles all day and then comes home to face two more hours of the same stuff he couldn't do in school. It's so hard for him, but I can only help him for about half an hour by the time I get dinner ready, clean up and help the other two boys. If somebody has a ball game, that delays the whole agenda.

I suppose ball games aren't as important as education, but now he's getting neither. I think I will hate myself if I look back and see that I'm responsible for Carl missing the fun of childhood because I was standing over him with a scowl, making him do schoolwork when all his friends and brothers are shooting baskets. There has to be a balance here. I am going to see that he works very hard for 45 minutes and what is finished is finished. I can live with that and so will the school.

Mrs. Fry says a team met to discuss the possibility of getting Carl some help from a tutor or intervention specialist. I want the help, but I could just cry. My poor little boy who was so bright-eyed and anxious to learn is now labeling himself a failure and the adults are about to confirm it. I wonder how he will handle the embarrassment of having his friends making fun of him. Kids can be so mean! I know that this is bound to happen.

I hope they don't make me come to the next meeting she mentioned. Every time I go to the school, I feel depressed for a week. What did I do wrong? Other kids don't seem to be having this much trouble.

Student's Perspective:

School stinks! It's not fair that the other kids get their work done and can do the fun stuff. I can't help it I'm dumb. No matter how hard I try, it's not ever enough, so why keep killing myself with work that doesn't matter? It's just not worth it. I really don't care if I get an F. The teacher said I have so many F's and D's I can't bring my report card grade up now even if I get A's for a week. Everybody's mad at me, but not as mad as I am. It's just not fair!

When everyone involved is being stung by feelings of failure and frustration with the system, something in the system needs a major overhaul. Voices of failure and helplessness ringing through people's minds eventually end up as energy spent on useless activities, like blaming and trying to shift the problem-solving responsibility to someone else perceived as being more capable. This shifting of responsibility to the new person would be fine if it would consistently solve the problem, but generally, the "solution" has problems of its own.

The format for IATs encourages a new way of thinking for staff in many schools. Most importantly, the format provides a framework that ensures implementation of interventions that are likely to work. The IAT continues to follow up until the problem is solved or the student graduates - whichever comes first. The framework does not provide an "easy route," but it has proven to be efficient and effective.

It reduces the paperwork, broadens the scope of problem-solving possibilities, focuses on goals and solutions rather than on problems, and gets quick help to anyone requesting assistance.

Questions and Answers

What is an IAT?

The result is a clear picture of what it takes over a period of time to reduce/resolve the learning problems.

An IAT is a resource for both general and special education staff, parents and students that will help provide powerful ways to teach new skills and develop success in learning. It is also a system of activities for monitoring progress as the team tests various hypotheses about how the student learns most efficiently. This embedded problem-solving training is meant to help students, parents and staff build a rich and expanding bank of ideas to solve current and future problems.

It is:

1. A system that provides assistance in identifying, developing a hypothesis, and creating a plan to solve learning problems;
2. A system of tracking the success of interventions;
3. Embedded professional development for those who request assistance.

It is not:

1. A committee charged with the responsibility to tell others how to run their classrooms;
2. A hoop to be jumped through to get to special education identification for students.

What does an IAT look like?

An IAT is usually a group of two to four faculty members, two or three family members (including the student) and one or two resource people who jointly share the responsibility for addressing problems that serve as barriers to the academic success of a student. Teams pool insights and ideas, and look at data over time to create a plan for solving specific problems that interfere with the student's progress.

Because teams are ad hoc, large schools avoid delays in service by being able to create multiple teams.

Who should be involved?

Faculty. Many IATs are comprised of a static team of faculty members with parents and other resource people invited to attend when needed. It is more effective to put together the most necessary resource people on a case-by-case basis, which prevents "burnout" caused by using the same group for every referral. Varying the membership also provides a deeper pool of ideas. The same group of faculty cannot be expected to be experts on every type of problem.

Keeping the process positive, action-oriented and efficient from the start will set the tone for all other interactions.

Administrator. Administrative participation is critical to the success of the IAT. Initially, the task of establishing a positive, action-oriented and efficient meeting often falls to the principal as people learn a new way of thinking about problem-solving.

Often the group needs to allocate resources, adjust schedules or resolve conflicts. An administrator is key to addressing these types of issues.

It is not always essential that an administrator attend all follow-up sessions as long as he/she stays accessible and informed of the progress of the case.

Parents. Parents should be involved from the beginning as consistent team members rather than as receivers of information and requests. Involvement in the team's work increases chances of follow-through at home and reduces feelings of "parent as victim."

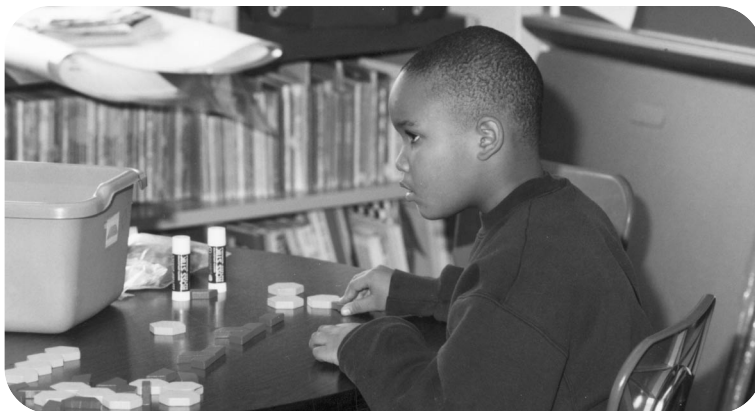
Students. If students see themselves as a working part of the team as opposed to "victim of" the team, taking part of the responsibility for success follows naturally.

Younger children (i.e., ages three to five) generally stay only for the beginning of the meeting to explain what things are difficult for them and what ideas they have to offer. They reappear at the end of the meeting to help select interventions for which they will take responsibility and hear what the adults will do to help them. (See *Coaching the Student*, page 108.)

The older students (i.e., ages six years or older) generally stay for the entire meeting and have the same responsibilities as the adults. (See *Key S: Meeting Procedures*.)

Others. Anyone who might be instrumental in creating an effective intervention is considered for membership, assuming parents agree and their involvement does not make the team too big to be efficient.

Note: Not every person who sits on the original team with a given case is committed to attend all follow-up meetings. The team make-up should be flexible and adjust to suit the specific purpose of the various meetings.



How much time does it take?

The actual IAT meetings range from 20 to 40 minutes, but the preparation time is critical and much more time-consuming. Individual task time may be:

Intake interview	20 to 45 minutes
Gathering baseline data	(See Note 1 below)
Coaching the parent	5 to 20 minutes
Coaching the student	10 to 20 minutes
Researching interventions	(See Note 2 below)
Tracking changes	(See Note 3 below)
IAT meeting	20 to 40 minutes
Follow-up meeting	10 to 30 minutes

The bottom line is that this process takes time, but it is a “pay now or pay later” deal. Whatever time is spent on finding the key to helping the child will eventually decrease the time other will have to spend fighting and fixing the symptoms of the problems. It is worth the investment.

Note 1:

Time to gather baseline data depends on how much recorded data the teacher already has. Since the team will focus on one or two specific issues, data gathering is generally not as complex as the process some teachers dislike already. The teacher (or whoever needs to assist the teacher) will be gathering only the data that will guide the team in solving the issues identified during the referral interview.

Note 2:

Time to gather and select interventions may take minutes, as team members brainstorm with people they often tap for suggestions (people with whom they eat lunch, teachers from other departments or grade levels, their own parents or neighbors). It could also take hours if the problem is one requiring research or special training. The time will vary, depending on the student's problem and the background of the team members.

Note 3:

Time for tracking progress will vary, depending on the skill being tracked (words per minute, quality of notes taken, levels of questions asked and answered, number of interruptions) and the frequency of the sample to be taken. The number of people involved in gathering and analyzing the data also will influence the time it takes to track changes.

What resources are needed?

A team of intake coaches. The intake coaches are teachers or administrators.

The roles of the coaching team members involve:

1. Leading the referring teacher(s) through the process of identifying and describing the problem, analyzing the root causes, drafting a hypothesis for solution and establishing the procedures for measuring growth;
2. Possibly making the follow-up call to the parent;
3. Possibly coaching the student in preparation for the meeting;

4. Assisting in gathering data, if needed;
5. Possibly serving as a member of the IAT.

A diverse pool of experts from which the intake team is selected is critical to the success of the process. Each team member agrees to build expertise in an area that seems to be one of the recurring problems brought to the IAT. The school then helps provide training and resources necessary to support each person's area of choice (i.e., conferences, articles, videos, books, visitations). These "experts" are the pool of people from which the IAT members are selected for each individual student case.

Using **document templates** can keep record-keeping simple and consistently thorough. Ultimately, these documents can reduce the redundant and time-consuming paperwork that is required:

1. Intake Summary
2. Meeting Minutes (pages 110-111)
3. Tracking Forms (pages 101-102)

Suggested Resources:

Archer, Anita. *Skills for School Success*. Sopris West, 2000.

Marzano, Robert, et al. *A Handbook for Classroom Instruction That Works*. Association for Supervision and Curriculum Development, 2001.

Cole, Sandy, et al. *Adapting Curriculum and Instruction in Inclusive Classrooms*. Indiana Institute on Disability and Community, 2000.

Silver, Harvey, et al. *So Each May Learn, Integrating Learning Styles and Multiple Intelligences*. Association for Supervision and Curriculum Development, 2000.

Procedures for Intervention Assistance Teams (IATs):

The IAT process has six steps:

1. Guiding the teacher(s) through the referral process;
2. Coaching the parents and the student;
3. Gathering intervention ideas;
4. Holding the problem-solving meeting;
5. Implementing the action plan and tracking progress;
6. Holding the follow-up meetings.



Key Q: Referral Process

Although there is sometimes an advantage to having a variety of people pinpoint the problem, it is not generally an efficient use of team time. It is much more effective to have one trained teacher or administrator act as the coach to help the referring teacher(s) complete the six-step referral process. These coaches must be people who are capable of establishing and maintaining trust by being non-judgmental, as well as helpful. The process looks like this:

1. Identify the high-impact issues to change that will help solve the problem;
2. Analyze the symptoms to identify the root causes;
3. Describe the symptoms of the issues;
4. State specific goals and hypotheses for removing barriers;
5. Identify interventions already tried and how the student responded;
6. Design a data collection system for tracking growth toward the goal(s).

1. Coaching the teacher(s) to identify a high-impact starting place.

Coach: What are the main reasons you are referring Loretta?

Teacher: Loretta is reading two years below level; she doesn't turn in her homework; she is nasty to other kids and they don't like her; writing is very hard for her and she is constantly out of her seat bothering others.

Coach: Which of these problems is most critical in terms of Loretta's learning progress?

Teacher: I think writing is where I would like to start. If she could stay in her seat, I think her ability to get things down on paper would improve. Can we do both?

Attacking all the problem issues at once is a design that will fail, so deciding to focus on no more than two issues at a time will increase the likelihood of the plan's success. The coach makes certain the key focus areas are issues related to grade-level indicators.

2. The next step is to help analyze the problem. What causes or maintains it?

The technique for doing problem analysis is called "Five Causes Deep," modeled after the "Five Whys" strategy of Peter Senge (1990). In this system, the coach helps the teacher state the problem and then unravels it to find the root cause. The coach guides the teacher to answer some form of the question, "What is causing this to occur?" After each of three or four successive answers, if two or three equally likely answers occur, the coach asks the "Whys" for each one. Many times the answers converge and a root problem seems to emerge.

Fixing the symptom will eventually backfire. We must fix the problem.

- Coach: Let's start with the writing issue. What is the main problem as you see it?
- Teacher: Loretta hasn't turned in a complete assignment in two months. (Symptom)
- Coach: What do you think causes her not to turn in assignments?
- Teacher: She hates to write. (Attitude symptom)
- Coach: What causes her to hate writing, in your opinion?
- Teacher: It is hard for her. (Too vague)
- Coach: What makes it so hard for her?
- Teacher: I'm not sure. It could be that she has a hard time making the letters. Or it could be she can't put a sentence together. Or maybe she just gets discouraged because she gets bad grades on every paper. (Possible causes)
- Coach: Let's try the "she gets bad grades" answer first. What causes those bad grades? Do you see any specific pattern of errors?
- Teacher: I'm not sure what the specific pattern is. I think there are many different problems, like spelling, punctuation and fragments. (Need to look at work samples to verify which skills)
- Coach: Maybe we need to take a look at her work.
- Teacher: Just as I thought, all three are problems.
- Coach: The question we need to answer is why these skills are missing. She didn't pick them up when it was taught before so she must need a new approach when we teach them this time. For instance:

Key Questions - Has she had enough **modeling** to get a clear mental image of what is needed? Does she need **more time** to work on **one skill at a time**, but in context? How much **practice** does she need to solve this? Does she need quicker and more frequent **feedback** to build **confidence** so she is willing to try? What **style** of instruction and practice would be most effective for her: visual, auditory, kinesthetic, multisensory, concrete, creative? Does she need **more support** as she is working, like a buddy, spell check, graphic organizers? Does she need a certain kind of **environment** (small group, independent) to learn best? Is there something about her **culture** that we need to address?

These are some of the questions that might unlock potential reasons for the problem.

One rule of the exercise is to stay within the teacher's circle of influence.

If done skillfully, an exercise like the one above can be useful in helping the teacher, or group of teachers, see specific barriers to learning not previously identified. If any of the questions prompt an answer signaling something outside our circle of power to change, then other questions must be asked to prompt answers within the circle of influence.

It is important for the coach to steer away from blaming people, because punishing and excusing take focus away from changing as the solution. If blaming or steering out of the circle of influence is a problem, the coach should ask if this is the only reason for the problem as each answer is recorded.

Teacher: Her mother and father don't write very well.

Coach: Obviously, that is a contributing issue and we have to keep that in mind as we ask them for home support. But for this exercise, since we can't change the skills of her parents, can you think of another potential cause for her weak skills?

The "Five Causes Deep" is a system-thinking strategy to prevent wasting time by focusing on problems we are not likely to solve.

What we need to do is find out what things in the system cause other things to happen; only then can we focus on root causes.

3. Coaching the teacher to clearly describe the symptoms of the root problem.

This will help the team understand the problem so they can develop appropriate interventions. It will also help the teacher decide what baseline data needs to be collected and how to track progress on the goals.

For the academic symptoms, the coach will ask questions such as, "What is Loretta's frequency of good writing, her accuracy rates of specific skills, the types and patterns of errors made, the lengths of sentences she writes? Can she describe what makes a good paragraph? What is her attitude toward writing?"

For the behavioral symptoms, the questions will relate to: places where the problem occurs; time it occurs; triggering incidents; how long the behavior continues; how frequently the behavior occurs; what she is typically doing when she is out of her seat.

The coach's job is to help the teacher put together specific and helpful clues that help identify what is really happening with the student. The coach records the information in a way that will help the team see patterns that may be occurring.

4. After the possible root cause has been identified and described, the coach helps the teacher generate a hypothesis about what might reduce or eliminate the problem. A goal is then developed from that hypothesis.

Teacher: I am beginning to wonder if Loretta understands what good writing is. She may not have a clear picture in her head and she may not even know where to start. She does respond to pictures and diagrams. Maybe we should begin there. She has handwriting problems, but for now I want to focus more on getting her to organize and write down her ideas. Capitalization and punctuation aren't as bad as organization.

Coach: So your hypothesis is "If we can give Loretta a clear visual picture of the steps and thinking of good writing, she will do better."

Teacher: Yes.

Coach: Based on that hypothesis, let's create a goal that we can measure in a specific timeframe. That will help the team; Loretta and her parents know exactly what you expect from her and how you are planning to measure her success. What change do you want to see in the short term, maybe in four to six weeks?

Teacher: I think it would be reasonable for Loretta to be able to write a four sentence descriptive paragraph using correct punctuation and capitalization, with enough conventional spelling so that her paragraph can be read easily. Those are the indicators I'm working on this month with everyone, so it will fit perfectly.

Coach: What about the penmanship issue?

Teacher: I will work on it, but I don't want to focus on it right now. That might be more than she can handle. I'm picking my battles carefully.

Coach: Good thinking. Confidence might be a key here. We could tell the team to include suggestions to boost Loretta's writing confidence.

Teacher: Sounds good to me.

Coach: So your hypothesis for reaching this goal is?

Teacher: If I can help Loretta get a clear picture in her head of what organized, descriptive writing is and increase her confidence as a writer, I think we can meet our writing goal in two months.

To do a good job, the IAT must have a clear idea of the goal the teacher(s) wants to reach and the hypothesis about what could very well make this possible.

5. Identify student responses to past interventions to help the team understand the student's style of learning.

First, the coach asks for two or three strategies that were not effective for the student. This information will help team members know what types of strategies are least likely to be effective. It is also helpful to list strategies that showed promise of effectiveness.

Identifying a list of responses to interventions already tried will give the IAT a peek into the student's way of thinking and learning style.

Coach: *It will be helpful if you would list a few interventions you have already tried. This step is not to check to see if you've done anything, because it is obvious you have, and also obvious that you are concerned about Loretta. The purpose is for you to give the team an idea of what types of strategies are likely to work for her. A couple of strategies that were definitely not helpful, and a couple that seemed to be on the "right track," will save us a lot of time.*

Teacher: *Sure. I can think of two that did not help at all. First, I cut down the length of her written assignments, which did not help improve Loretta's actual writing skills. Then, I put her into a writing group and she not only didn't get her work done, but kept other kids from doing theirs.*

Coach: *(Taking notes) So, small group work and cutting down assignments don't seem to help. Got it. Now, what about some things that seem to help, at least a little.*

Teacher: *Well, I had her working with a volunteer mom for a couple of days and Mrs. Diaz seemed to be able to keep her focused long enough to write. When the help was gone, Loretta was not able to continue on her own. One time, I gave her a copy of another student's paragraph with key words missing and all she had to do was fill in the missing words and then copy. That strategy resulted in products that were better than her typical work.*

Coach: *Great. Models and coaching could be a place to start.*

This description of the key problem, the goal and the hypothesis for solution and intervention insights will now be given to the IAT members by Loretta's teacher. This information will give the team members a chance to ask clarifying questions before they start searching for intervention ideas.

Coach: *Who do you think would make the most powerful team for this case?*

Teacher: *I would like to have Ralph and Lena. Lena knows Loretta from last year. I've heard that Ralph did some course work on writing this summer. He may have some new approaches.*

Coach: *And I would like to include Sanjae. Two of his students are having trouble with writing. Maybe we can give him some ideas without having a separate IAT meeting.*

Principal's Tip:

Involving the teacher in the selection of the IAT members helps in two ways:

1. The people selected are being picked because of their expertise on the particular type of issue. Since no one can be an expert at everything, using the same group of people for every case cannot be the most powerful option you have.
2. Because the referring teacher has had a say in the selection of members for the IAT, he/she may be more inclined to value the advice of the group.

The whole team for Loretta's case will be made up of: an administrator, Sanjae, Ralph, Lena, the referring teacher, Loretta and her parents. This number of members, or even a fewer number, results in a good size for a team. As the issues and needs of the case change, the team may need to add new experts and discontinue others. As new members are added, it is wise to put some of the original members "on call" rather than overload the team with too many members.

Including too many people reduces efficiency and can make the parents uncomfortable.

In departmentalized situations, it is often wise to interview the whole group of teachers for the referral, but send one or two teachers to the brainstorming meeting, so that the parent(s) and student do not feel overwhelmed. Since the meeting will not be focused on reporting and identifying the problem, the entire group of staff members need not be present.

6. Design a data collection system for tracking growth toward the goal (Baseline Data Collection).

The baseline data identifies where we are now so we can see if the plan makes a difference in the "right" direction.

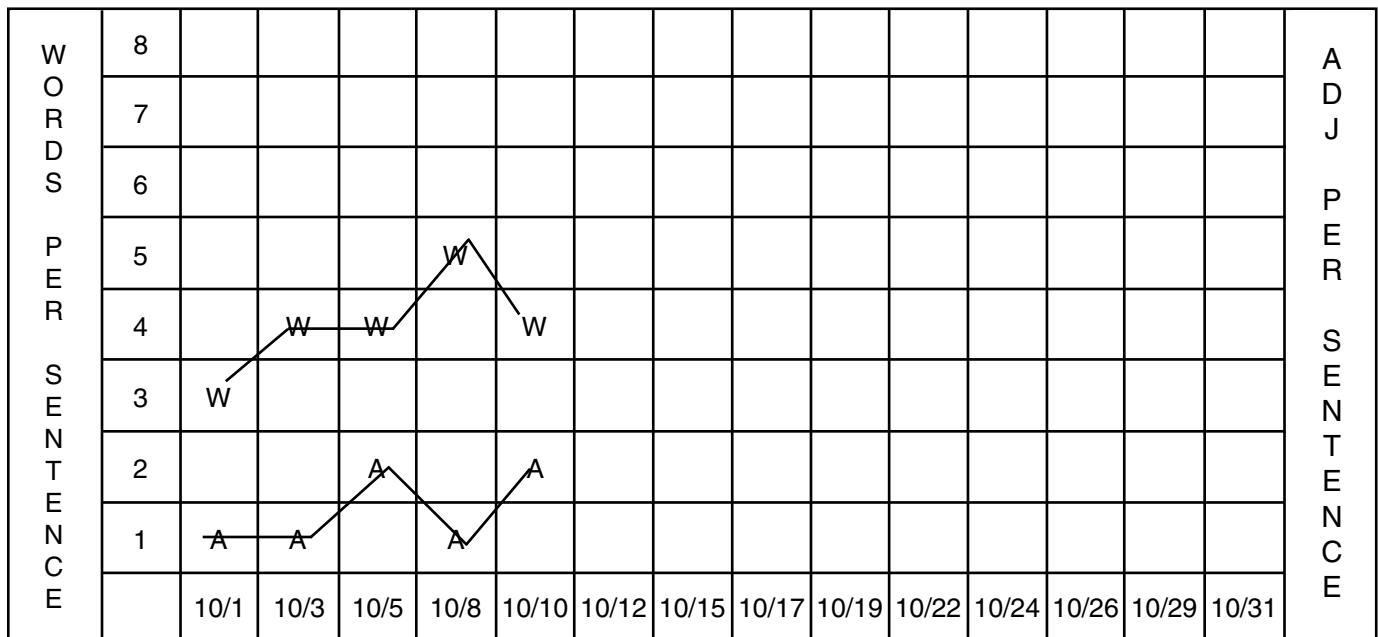
The goal statement set by the teacher(s) is most valuable if growth toward it can be measured in small increments. Students and teachers soon tire of putting in extra effort if they see no return on their time and energy investments. This baseline data needs to be presented at the first meeting in chart form (see example progress chart, page 102).

Typically, growth on easily monitored goals should be measured and plotted **two or three times a week**. Some typical and easy data to collect might be:

- Decrease in frequency of specific errors;
- Rate at which the task can be completed;
- Percentage of accuracy;
- Lengths of responses;
- Skill in summarizing accurately;
- Completeness of task relating to items on a checklist;
- Quality of the task based upon a rubric.



Example Progress Chart



The student, teacher(s) and parents should record information with regard to growth shown, based on their particular responsibilities that are outlined in the plan. At least **seven data points** are needed to show a trend. At the follow-up meeting, all information is shared and “next step” decisions are made, based on this data. This does not imply that adults and students are not sharing data along the way.

Research shows that for best results, students need feedback on the same or the next day after the task is completed to optimize improvement (Kulik, Kulik and Bangert-Downs, 1990). This feedback needs to be very specific to affect learning (“four more words are correct” instead of “you earned a C”), (Crooks 1988).





Key R: Coaching Procedures

Coaching the Parent

Parents can have a variety of emotions when asked to attend an IAT meeting. Some are relieved and grateful that so many faculty members are taking the time to focus on their child and work on his/her growth plan. Others have had miserable experiences with schools, both as students and as parents of struggling learners. These parents may feel intimidated, annoyed or even irate at the thought of having to attend one more meeting for educators to tell them what they already know.

For these reasons, “coaching calls” before IAT meetings are generally productive. The purpose of the call is to:

1. Communicate the “why,” or purpose of the meeting and to establish a common agreement about what needs to be solved;
2. Help parents understand about the who, what, where and when of the process;
3. Explain the “Rules of the Road” for IAT meetings (page 104);
4. Describe the parent assignment as part of the team (and offer assistance if they need ideas to help them get started on this assignment);
5. Tell them that someone will make a follow-up call after they have some time to put together any questions they might have.

Before making the parent call

The coach should ask the referring teacher, “How much two-way communication has already happened between you and the parents concerning this problem?” Typically, the teacher has had numerous discussions with the parents about the problem, but occasionally a teacher will have had no contact with the parents. Sometimes, all the communication has been written or “assumed” to be understood because of written comments on student papers. Assuming that parents are aware of the problem can be naïve, especially considering today’s societal factors (i.e., both parents working outside the home, a single parent working two jobs). Some parents don’t or can’t read and some students tend to hide the “evidence.”

Before, after and during the IAT process, maintaining a positive teacher-parent relationship is critical. The IAT is simply an advisory group to serve the parties who have direct responsibility for the growth of the student. Except in extreme cases, only after the parents or caregivers and the teacher have worked together, is it advisable to turn to the IAT for assistance.

Parents generally resent being launched into a formal process before they have had time to work through an informal one with the teacher.

In an attempt to keep the teacher in the driver's seat, the teacher should be the initial "coach to the parents." Of course, if the teacher already has a "tenuous" relationship with the parents, someone else should take this role. The conversation would go something like this:

Teacher: Hi, Mrs. Jones. This is Connie Knight, Loretta's English teacher.

Parent: Oh no, Loretta's still not working is she?

Teacher: She is still having a hard time with writing and completing assignments that require writing. You and I have been through all the ideas I thought might work. I have a proposal for you that might help.

Parent: If it could help, let's hear it.

Teacher: We often put together assistance teams in our school when we are stumped. We select the most powerful group of thinkers available to us and they, in turn, give us ideas of what else we can do that we haven't already considered. The group is called an Intervention Assistance Team or IAT, and it is available to any teacher who needs it.

Parent: Why doesn't everybody use it?

Teacher: Well, it takes quite a bit of time and effort on the part of many people, so we save it for cases like ours where we have already tried a number of things but can't seem to find a solution that works.

Parent: What do I have to do?

Teacher: Just agree to become a team member. I've already had a referral conference to get our names on the docket since I assumed you would like the idea. I have three teachers in mind who can help us. So the team will be made up of Mrs. Bliss, the principal; Lena Caswell, who you already know; Ralph Zerno, who has just had training in helping students write; Sanjae Tribi, who has a couple of students who are struggling with a similar problem; Loretta, since we absolutely need her cooperation; and you and your husband.

Parent: That's a big group.

Teacher: We can make it smaller if you would feel more comfortable, but I think we need all the help we can get. In fact, if you can think of someone you believe would be able to help, we can even add that person to the list.

Parent: My sister might be able to help, but let's start with your group first.

Teacher: Fine, and if we need to add your sister later, we can do that, too. We would like to meet next Tuesday morning at 8 a.m. in the library if that works for you and your husband.

Parent: My husband will not be available, but I can make it.

Teacher: Would you rather choose a time when he can attend?

Parent: Not really. My husband is now working two jobs, so these jobs tend to fall to me.

This covers the who, when, where, what and why part of the conversation. Now we need to make certain the parent knows the rules and assignments for the IAT process.

In Connie's school, the team has come up with six quality "Rules of the Road" designed to keep groups focused on solutions and to keep the meeting moving along toward a helpful plan of action. These rules are stated in both the parent and staff handbooks.

"Rules of the Road" for IAT Meetings

1. Every meeting will have a timed agenda and we all agree to stick to it.
2. No one may discuss the problem. We focus on the goal and how to achieve it.
3. If someone has a point or issue to bring up outside of the agenda, we agree to write it down and bring it up after the formal agenda has been accomplished.
4. Meetings will generally last between 20 to 40 minutes and always result in a plan of action.
5. Every member will come prepared with at least three creative interventions that directly relate to helping the student move closer to the academic goal as identified.
6. Only the person involved in implementing a suggestion may select it. No team member may select an action item for someone else to implement.

Connie will explain these rules to Loretta's mother:

Teacher: We have created a set of "Rules of the Road" for meetings to ensure we stay on target, create a positive environment and leave with a plan of action every time. Basically, the rules state that we agree to: come prepared with helpful ideas, stay on the agenda topic and only talk about solutions, not problems. This means that if any member forgets the rules, you should feel free to gently remind them and they will have that same freedom to remind you. The easiest one to break is "no talking about the problem."

Parent: How can we solve the problem without talking about it?

Teacher: The team of experts will be given some basic information ahead of time. I try to give them an insight about how Loretta seems to learn and what gives her trouble. They don't need a detailed history of the problem like we do. I will send you a copy of the referral sheet I intend to give the team. If you think there is something else they need to know, just call me and I will add it.

Once they know the basics and what goals we have for Loretta, their job and ours is to brainstorm as many different ways to help her as we can. From this list, we will select the most powerful ideas and then they will help us monitor how well our plan works. Talking about and choosing the plan is all we really need to do during that meeting.

Parent: That is certainly a different approach. That really works?

Teacher: Our old system usually got us stuck on admiring the problem and we often didn't even get to the solution. This way Loretta will be less likely to feel we are putting her down or picking on her. Hopefully, she will see we are all on her side.

Parent: Actually, it may help me feel the same way. It's tough to hear that your child is having problems, even when you know it's true.

Teacher: As a parent, I know just what you are saying.

Connie will also explain the assignment to Loretta's mother. Since all members have a copy of the referral intake sheet, they will be aware of the goal for the meeting. Each person will bring at least three powerful ideas for helping achieve that goal. One intervention will be **for the classroom teacher(s)** to implement; the second will be **for the family** to implement; and the third will be **for Loretta** to implement at home or at school. If each of the six IAT members bring three ideas, then they will have, at the very least, 18 good ideas that serve as springboards for other strategies that can be generated on the spot.

The fact that parents and students have the same assignment as the teachers and principal says something to everyone about the true sense of "team." Focusing on the action plan instead of the problem totally changes the dynamics of the typical parent-teacher discussion. They truly become partners in action.

Teacher: There is one more part of the procedure I need to explain. We all have the same assignment. Each of us must bring three ideas of how to help Loretta become a better writer, since that is our goal for this time. One idea should be for me to use in the classroom, one for you to use at home and one is just for Loretta to use for herself.

Parent: I am supposed to tell you how to teach writing?

Teacher: No, you wouldn't be telling me how to teach. You are just making suggestions you think might help me in the classroom to improve Loretta's writing skills. There are things you know about her that I can't ever know or maybe you can think of something you read or something a teacher did to help you when you were learning to write, that worked.

Parent: I'm not sure I will be able to think of anything.

Teacher: Let me give you some ideas of what other parents have suggested. Maybe one will sound right for you or trigger another idea. You might be able to give me a list of things she may enjoy writing about, or a tip about how to assign homework. Maybe some way I can make it easier for you to help Loretta at home.

Parent: Oh, not how to teach, but ways you can help. I can do that.

- Teacher: You also need to come with an idea you want to try at home yourself. It could be something you tried before and want to try again or a brand new approach. You could ask a neighbor or your sister for some thoughts.*
- Parent: Okay.*
- Teacher: Your third suggestion is one you will give to Loretta so she can help herself. You and I will not take responsibility for these strategies, but Loretta will. Maybe your mom can think of things she did with you when you were Loretta's age, like asking you to write notes to remind you of things, games you played that required writing or asking you to request things you wanted in writing. These are the little things people do as adults every day that Loretta can do.*
- Parent: So I need three ideas, one for each of us. You're going to put me to work.*
- Teacher: We are all three going to be working extra hard for a while. Loretta needs to see that we are all working on the same team to make things better for her. By not revisiting and talking about old problems and making her feel discouraged, we will win half the battle. Letting her see that we are going to help and that she must be part of the solution will help Loretta meet the goal of writing a good four-sentence paragraph within six weeks. I need for you and for Loretta to believe that it can happen if we all really try.*
- Parent: Even if she does write the paragraph, she probably won't be able to find it to hand it in.*
- Teacher: I know organization is a real problem and we will continue to work on that. We can add some organization strategies to the formal plan after we get a foothold on this writing. Right now, I think we will be wise to focus on one thing at a time unless you have strong feelings about doing the organization part now.*
- Parent: I will be anxious to get to the organization part of the plan, but I'll go with one thing at a time if you think that's the way to start.*

The final point Connie needs to make is the **follow-up call**. Someone at the school, generally the administrator or the faculty member trained to be an IAT coach, will call Loretta's mother back within 48 hours. This call gives the parent an opportunity to voice concerns or ask questions that didn't come up in the conversation with the teacher.

If a parent isn't as receptive to the idea as Loretta's mom, the angst of the initial phone call might distort what the parent heard. Anger and verbal outbursts are better resolved with one person on the phone than in a meeting with four or five professionals, who are not directly involved, who end up wasting their time.

A follow-up call reduces the chance that parents will show up for the meeting upset or angry.

The other reason for the follow-up call is the "doctor's office" syndrome. We have all experienced times when we didn't think of the questions we should have asked until the doctor left the room. Parents often wish they had asked more questions after the initial IAT conversation. Sometimes, these questions don't come up until the other parent comes home and wants to know more. Knowing someone from the

school will be calling back later gives parents a chance to resolve questions and issues before the meeting. The result is a more prepared and at-ease parent during the meeting.

Teacher: *So the seven of us will meet at 8 a.m. Tuesday in the library. We will all come prepared so the major part of the meeting will be brainstorming and selecting the action plan. I have developed ways to track Loretta's progress and I will show you those forms on Tuesday. Do you have any questions I haven't answered about this?*

Parent: *Who will track her progress?*

Teacher: *Loretta, you and I will all need to do parts of this. We will collect just enough information to see if what we are doing is working. We can get help from the team if we need it but I doubt that will be necessary. We believe in keeping it very simple; something that can be done regularly, but in less than two minutes. In most cases, it's a matter of making a check on a chart. Any other questions I can answer?*

Parent: *I can't think of any right now.*

Teacher: *People often have questions after they begin to think about the meeting. Your husband may come up with some as you discuss this with him. Tomorrow or Friday, the principal will make a courtesy follow-up call just to see if you do have further questions or if you need help with coming up with your assignment ideas. The more comfortable and prepared we all are, the more effectively we can help Loretta.*

Parent: *Should I tell Loretta about this meeting or will you do it?*

Teacher: *I am planning to ask Lena Caswell to be Loretta's coach and advocate for the meeting. I know they hit it off well last year so I think it is a great match. Basically, what that means is that Lena will make certain Loretta understands what we are doing and then she will help Loretta get her three ideas together. If Loretta gets a bad case of the jitters during the meeting, it will be Lena's job to help her. We want Loretta to feel some power and responsibility and Lena will see to that. If you like, when Loretta gets home you can tell her about our plan and how Mrs. Caswell will be her helper. I doubt Lena will get to see Loretta today.*

Parent: *You mean Loretta has the same assignment as I do?*

Teacher: *Everyone on the team has the same assignment – principal and student, teacher and parent. We are serious about working side-by-side as a team. We all work together.*

Coaching the Student

Coaching the student follows steps similar to coaching the parent:

1. Make certain the purpose and goal of the IAT meeting are clear;
2. Give the who, what, where, when and why answers so there are no surprises;

3. Come to a clear understanding of the “Rules of the Road;”
4. Provide the student with as much help as he/she needs to make certain the assignment is done with quality.

Many times, choosing the classroom teacher to coach the student is wise, assuming that the child and teacher are not at odds about the problem and have an excellent relationship. The principal can be a good choice for a student who needs to feel power on his/her side. Sometimes, it is another person assigned to this case as an IAT member with whom the student has a comfortable relationship.

The coach for the student can be anyone who is in a good position to serve as the student-advocate during the meeting.

After clarifying the teacher’s perception of what the goal should be, the coach makes certain the student’s perception matches. Sometimes, an additional focus needs to be added if the student has another goal that might very well contribute to the solution. The coach then helps the student brainstorm a list of things the teacher could do to help him/her meet this goal. The second list will be ways parents can help, and the third list will be things the student can do to meet the goal. The coach may suggest possibilities if the student gets “stuck,” but the final set of suggestions should be things the student believes will help. From the brainstormed lists, the student selects at least one suggestion for the school staff to implement, one way his/her parents can provide support and one task for which the student will take responsibility. These will be submitted to the team during the IAT meeting.

The fact that the coach has helped the student create and record these suggestions reduces the possibility of the student feeling unable or unwilling to contribute.

During the meeting, students may get “stage fright” and want the advocate to act as the spokesperson. The role of the coach/advocate is to help the student feel as much a part of the solution design as possible and still minimize feelings of intimidation and frustration.

Young children (age three to five) will need much more guidance and assistance in coming up with and reporting their ideas to the team, but it is no less important for them to feel a part of the plan just because they are young.





Key S: Meeting Procedures

The Initial Meeting

The meeting agenda is simple, efficient, and follows Steps 1-7:

1. Review the goal, hypothesis, meeting procedures and “Rules of the Road;”
2. Assign roles to every member;
3. Brainstorm the three lists of interventions: school, home and student;
4. Select the items for action (each person from his/her own list);
5. Decide how data will be collected to show progress;
6. Set the date for the next meeting;
7. Review the meeting for effectiveness.

1. Reviewing the goal, hypothesis and procedures takes only two to three minutes.

2. Each member is asked to take one of the following jobs for the meeting:

Taskmaster: Guides the meeting and sees that the team ends up with a plan.

Timekeeper: Keeps the group aware of how much time is left for each agenda item (this is often a favorite job for the student).

Recorder: Records and distributes minutes within 24 hours that include the brainstormed list of ideas, the agreed-on responsibilities and when the next meeting is scheduled.

Scribe: Writes the brainstormed ideas on a board or chart for everyone to see. These ideas are recorded under the proper columns: home, school or student. Some ideas are listed under more than one column.

Peacemaker: Sees that everyone has opportunities to be heard.

Process Observer: Watches the team for efficient and effective teaming behaviors and reports these observations at the conclusion of the meeting.

Assigning a role to everyone conveys a “we are a team” message. No one team member is a passive recipient of information. If there are more than six members, assign the role of process observer to more than one person. Students tend to enjoy being in the timekeeping role. The scribe needs to be someone who can quickly judge under which column the brainstormed strategies should be listed. When all team members have specific roles to play, the meeting keeps moving and flows smoothly.

Meeting Minutes Form

Student: _____ Date: _____			
Team Members in Attendance:			
Team Member(s) Not in Attendance (who need copies of minutes):			
Goal for Intervention:			
Hypothesis:			
Brainstormed Ideas: <u>S = School</u> <u>H = Home</u> <u>St = Student</u>			
Selected Items for Action: <u>Who</u> <u>Does What</u> <u>By When</u>			
How Progress will be monitored:			
Next Meeting:			



Completed Meeting Minutes Form

Student: Loretta Rogers

Date: February 25, 2004

Team Members in Attendance: Connie Knight, Lena Caswell, Sanjae Tribi, Ralph Serno, Caroline Bliss, Kathy and Loretta Rogers

Team Member(s) Not in Attendance (who need copies of minutes): Bill Thompson and Sam Rogers

Goal for Intervention: Within two months, organize and write a four-sentence descriptive paragraph with correct capitalization and punctuation. Spelling of difficult words must be close enough to read easily.

Hypothesis: If we supply clear pictures of what good writing is and increase Loretta's confidence as a writer, she will be able to meet this goal. She also needs to learn ways of organizing her time and ideas.

Brainstormed Ideas: S = School H = Home St = Student

- Use diagrams or webs for arranging writing ideas and for making plans for home and school. Someone else may scribe for her. (S&H)
- Model using a rubric and have Loretta critique other people's desks, papers, closets and paragraphs. The teacher will verbally explain the daily paragraph scoring on the day they are written, if possible. (S&H)
- Have a buddy or Mrs. Diaz help check for quality of writing assignments before Loretta turns in the paper. (S)
- Have Loretta write a good sentence every day for homework and in school. One activity is to improve a simple sentence by adding verbs and adjectives. School will supply a "great word" list to help. (S&H)
- Beginning and ending letters of difficult words must be correct; all assigned spelling words must be spelled correctly in paragraphs. (S&H)
- Create a contract that spells out a plan Loretta will follow for organizing ideas and materials. (S&H)
- Talk about ways her family needs to use writing each day and have Loretta write one sentence to help with one of these tasks. (H)
- Have a scavenger hunt and then have Loretta write a paragraph about what she did or what she found at the end. (H)
- Bring home a paragraph she rated in school and use the rubric to explain to parents why it is a good one. (H)
- Have Loretta set goals for how much written work is to be finished in a set time period. (St)
- Allow Loretta to choose a less distracting place to do assignments if she feels she cannot concentrate. (St)
- Write a sentence with Mrs. Diaz each day and use the rubric to tell why it is good or how it needs to be fixed. (S&St)
- Keep a list of fun things you want to write about. (St)
- Bring homework home every night. (St)
- Interview the best writers in the class and ask them to tell you their secrets of good writing. (St)

Selected Items for Action: Who Does What By When

Teacher: Model and have Loretta use rubrics to evaluate both desk organization and paragraph quality (by 2/27).
Model and have Loretta use concept webs for reading and writing activities (by 2/27).
Spelling on these paragraphs will only be graded on past spelling words and correct beginning and ending letters for this month (by 2/27).

Kathy Rogers: Help Loretta develop a checklist for organization, model its use and use to monitor quality of home chores. Have Loretta write one good sentence every night that either helps the family or improves a boring sentence by adding adjectives and adverbs (by 2/26).

Loretta: Interview the best writers to find new ways of becoming a good writer (by 2/26).
Critique and self-score daily. Use concept webs for reading and writing (by 2/27).

How Progress will be monitored:

- Loretta will develop a score sheet to match her goals for each week and will record progress on a chart.
- Teacher and parent will sign her self-assessment and state whether they agree. If they disagree, they will indicate why.
 1. The school monitoring sheet will have growth on words per sentence and adjectives per paragraph (completed by Loretta and teacher together every other day).
 2. Parent monitoring sheet will mark days Loretta completed her good sentence for homework daily.
 3. Loretta will report on what secrets of writing she found out from her classmates and what she uses in her own writing.

Next Meeting: 5/10/2004

3. The **Brainstorming** part of the meeting should not take long if everyone has come prepared with at least one intervention for each of the three areas - home, school and student. The scribe writes each idea in the appropriate column(s). At the end of the allotted time for brainstorming (typically about 12 minutes), the group is instructed to select the strategy or strategies **from their own column** that they think are likely to help and agree to implement. Keeping the goal in mind is of utmost importance as the group selects interventions.

School	Home	Loretta
Use a rubric to co-score a good paragraph every day. Let someone help me (<i>Loretta's idea</i>). Have Mrs. Diaz use a checklist as she models writing a paragraph. Have Loretta write one good sentence every day (<i>Loretta's mom's idea</i>.) Insist that only beginning and ending letters be perfect for spelling for now. Let her outline her ideas for her paragraph on a concept web and then dictate the sentences to a scribe. Score her paragraphs with her standing there on the same day she writes them.	Every day show Loretta one way you use writing and let her write one sentence for you. Have a writing worksheet for homework that we do together. (<i>Loretta's mom</i>) Have a scavenger hunt for her to follow each day and then write a sentence telling what she found at the end. Homework - using a model sentence, she will change the basic words and add two more words to make a more interesting sentence. We can supply a list of great adjectives and adverbs to help. Bring home the paragraph she wrote with a rubric to explain to her parents why the paragraph got a good score. Mom helps me write every day. (<i>Loretta</i>)	Write a sentence every day with Mrs. Diaz. (<i>Loretta</i>) Use a web to organize ideas. Think of fun things you would want to write about and keep a list. Make sure you can tell someone why what you wrote is good or how it needs to be fixed. Bring your homework home and show it to me every night. (<i>Loretta's mom</i>) Interview the best writers in the fifth grade and ask them to tell you some of their secrets of good writing.

4. Selecting the items for action.

The teacher will choose one or two of these ideas from the school column. Loretta's mom will choose something from the home column and Loretta will choose from her column. Commitment is very important. In the past, IATs have tended to assign tasks to others who came away with feelings of resentment toward team members. Allowing people to select strategies that seem reasonable will increase the likelihood that they will be implemented. There is assurance that at least one strategy will always seem reasonable, because everyone contributes. The question, "Will all these ideas be helpful in meeting the exact goal," needs to be asked before choosing. Some ideas might need to be starred as good ideas, but not for the specific goal(s) that are established.

It is a good idea to state that help can generally be provided if an idea looks promising, but requires additional training for team members to implement it.

This self-selection process also eliminates the need for people to shoot down ideas of others during the meeting. Since everyone is assured that no one will insist they choose what appears to be a ridiculous idea, there is no reason to debate its worth during the brainstorming process. They simply won't choose strategies that they feel are not reasonable.

5. Decide how data will be collected for tracking progress.

Measuring progress:

- Provides motivation ensuring frequent feedback on performance (to be shared with the student within 24 to 36 hours for maximum effect on growth);
- Helps those who are responsible to come to a common understanding of the goal;
- Helps determine if the plan is having a positive impact, or if it needs to be revised.

Deciding on what is to be measured, how it will be measured and how often it will be measured and recorded, helps maintain focus on interventions that are likely to make a difference.

As the teacher is deciding upon the goal statement for the IAT, it is important to decide exactly how she/he intends to measure the academic and behavioral progress of the student.

It is legitimate to address contributing social, cultural, environmental, emotional and behavioral issues if they relate to academic performance of the student. At least one area of measurement, however, must focus on the targeted academic goal.

Tip:

Don't forget to look for existing data before gathering new information.

Data can be gathered in a variety of ways.

- Formal tests – pre- and post- to judge understanding of specific skills and concepts.
- Performance assessments
 - o Work samples for error analysis or percentage of correct responses.
 - o Observations to record frequency of observable behaviors and/or effort.
 - o Problem-solving situations to analyze specific steps that are or are not understood.
 - o Student presentations used with checklists for observable behaviors and performances.
 - o Portfolios to judge types of errors and quality over time.
- Rubrics to judge quality of specific skills and products.
- Surveys and interviews for soft data (perceptions and attitudes of adults and students).

The display of information needs to be in a usable, easy to understand format.

- Line graphs to show changes over time.
- Bar graphs to show comparisons/relationships.
- Pie charts to show proportions.
- Summary statements to give general overviews and insights.
- Tables to show multiple areas of progress.

Sample Data Collection Summary Sheet

Date of Report	Behavior Measure	Days of Intervention	*Progress Made
Baseline 11/4/03	• Reads second-grade readability text at 45 wpm • Interrupts every six minutes on average • Homework 50 percent of the time	40 school days	• 21 words per minute of second-grade readability text • Increase of five minutes of good work time • Homework – same
1/12/04	• Reads second-grade readability text at 66 wpm • Interrupts every 11 minutes on average • Homework 50 percent	38 school days	• Increase of 12 wpm of second-grade readability text • Increase two minutes of work time • Homework improves 11 percent
3/4/04	• Reads second-grade readability text at 72 wpm • Interrupts every 13 minutes on average • Homework 66 percent • Writes full sentences 14 percent	(Continue for at least seven data points or until case is dismissed.)	

* New data (progress made) becomes the baseline for comparison to the next collection period.

Whatever format the summary sheet takes, baseline data is recorded and distributed to the team with the agenda. Everyone will then be able to see data evidence at a glance.

- Make certain the data collected reflects the skills on which the team members, including the student, have been working.
- Collected data needs to be worth the time it took to collect it.
- Baseline data presented at each meeting helps.

The teacher, parent and student should all be involved in collecting the data, individually or together. This reinforces the sense of ownership.

6. Before people leave the meeting, the team should establish a time, date and place for the follow-up meeting.

By setting a specific date before the group adjourns, everyone knows that something will happen with the data they are collecting. The data will be the basis for the next set of decisions that will be made. The charts that are brought to the next meeting will reflect the data.

The primary reason people do not follow through with their commitments is because they are not held accountable for results.

7. The final agenda item for the IAT meeting is the review of the quality of the meeting itself.

Take two minutes to ask the following questions:

- Did you find this meeting helpful?
- Do you believe we have a plan that will make a difference?
- Did we follow the agenda?
- Did we perform our assigned roles?
- What was effective about the way we handled the meeting format?
- What do we need to improve about the way we do things?

Teams who fine-tune the way they conduct meetings find that the meetings run smoothly and efficiently. Teams that do not review the quality of their meetings find themselves spending more time attempting to solve problems with less success and productivity.

What if the meeting gets out of control?

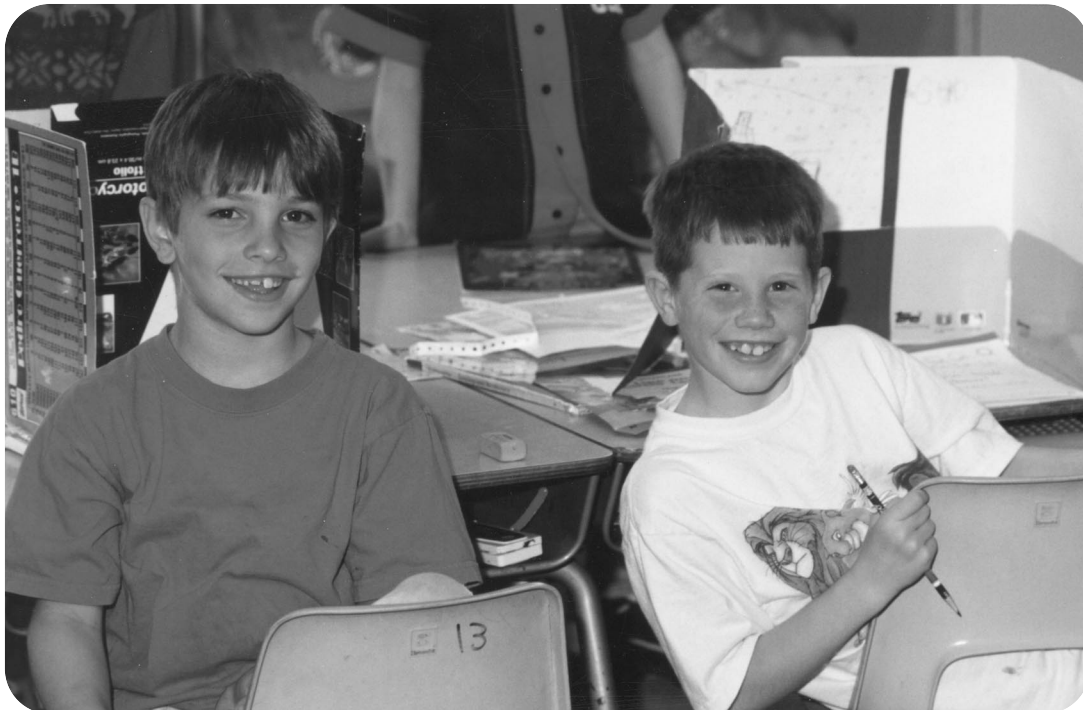
If the parent and student coaching are done well, most of the pitfalls for unproductive meetings have already been prevented. If everyone follows the “Rules of the Road” and focuses only on the goal instead of the problems, the potential for negativity from any team member can be avoided. The teacher should feel calm and in control knowing he/she has clearly laid the groundwork for reaching an important goal and has spoken to all key players about what support is needed at this meeting.

As with all best-laid plans, things can still “go south” because of the unexpected.

- If someone goes “on and on” about his/her idea during the brainstorming time, a gentle reminder from the timekeeper or taskmaster about what needs to be accomplished is usually all it takes to get back on track.
- If someone begins to blame another member, the taskmaster or administrator must step in and remind people to focus on how to fix the problem, and that the purpose of the meeting is not to blame, but to focus on the goal. A helpful statement might be, “If you feel you need to have a private conversation after the meeting, that can be arranged, but right now we need a list of ways to help the student.” Having people pause to write down the points they want to make after the meeting sometimes helps.

- If a person refuses to cooperate, the taskmaster or administrator simply dismisses team members by saying, “I am sorry, but it is clear we cannot solve this problem today. We will have to call another meeting and see if we can be more successful at a later time when everyone is willing to follow the ‘Rules of the Road.’ If you (to the off-task person) would like to stay after the meeting, I would be happy to see if we can address the issues about which you are concerned.”
- If someone becomes extremely emotional, the decision must be made about whether the agenda should be tabled entirely or just delayed. It is never wise to try to be efficient when the situation clearly calls for being effective, by showing concern and support for a person who needs it. The only decision is whether it would be better to give the person a more intimate group by dismissing some members or whether the caring concern of the entire group is what is needed to build a sense of team.

It is never wise to try to be efficient when the situation clearly calls for being effective, by showing concern and support for a person who needs it.





Key T: Follow-up Procedures

The Follow-up Meeting

Many times people leave a meeting with the best of intentions, but as life goes on, other things begin to take priority.

The follow-up meetings are critical to the success of the entire process. Once a plan for growth has been established, everyone has to know that at a given time, the group (or part of the group) will reassemble to see if the plan has had any effect. There is truth to the saying that “What gets measured, gets done.”

The agenda and procedures for the follow-up meetings are similar to the initial meeting. The agenda looks like this:

1. Review the goal, hypothesis, meeting procedures and “Rules of the Road.”
2. Assign roles to every member.
3. Each person assigned a data collection role (most likely student, parent and teacher) shows the data collected and reports on successes and barriers. Based on this data the team decides if:
 - a. The plan is working, so we can continue as is or we may add to the plan;
 - b. The plan is not working as well as we had hoped, so we will revise the original ideas or replace them with new ones; or
 - c. The plan is not working although everyone has followed through, so maybe our original hypothesis was incorrect. We need to rethink it and brainstorm ideas for a new hypothesis.
4. Decide how data will be collected to show progress for the next time period.
5. Set the date for the next meeting.
6. Review the meeting for effectiveness.

This process goes on until the problem is solved or until the student leaves the building – whichever comes first. If the student has shown significant growth, the team will discontinue the process with the understanding that anyone can ask that the team reconvene if the student does not continue to progress as expected.

As this IAT process is occurring, the team may decide that a full Multifactorial Evaluation (MFE) be initiated if the evidence that has been gathered indicates there is likely a disability that necessitates ongoing assistance. During the time the MFE is taking place, the IAT continues to work on interventions to uncover patterns of student learning and strategies that will be helpful in instructing this student. This IAT data is used to enhance the MFE findings and the recommendations of the MFE team. The IAT service makes certain that immediate academic assistance is available to the student. It also ensures that no time is wasted in providing the help that the student needs.

Tips for Leaders: Getting Started

Many schools will need to give the teachers a chance to think about this IAT process if it is different from what they presently use. This process, indeed, requires a shift in thinking about “placement” to thinking about intervention, and shifts in thinking take time. One way to introduce the process is to allow the faculty to verbalize the problems they are having in meeting the needs of struggling learners in their classrooms and then pointing out how this IAT process could help with some of these problems.

Typically, the key concerns that staff members often express are ones that surround student motivation, parental support and teacher training. Once the list is on the board, point out how the new way of handling IATs is designed to increase teamwork among family and school, as well as to provide embedded training for both parents and staff on new ways to approach problems. This process is no “silver bullet,” but it does provide quick, efficient help.

The issue isn't whether or not to spend the time; it is whether you want to continue spending the time solving things on your own or spend the time using a system set up to support you. Effective faculties create the time to do the things that pay off and discontinue doing things that haven't worked.

Time will most likely come up as the next issue. “We don’t have time to go to all these meetings, coach the parents, coach these kids and track the progress.” The truth is, staff is probably already spending a huge amount of time trying to solve discipline and learning problems, and feeling frustrated with the lack of progress students are making.

Be alert to the readiness level of faculty members as you begin the implementation. Some teachers will be able to implement the system immediately and others will feel overwhelmed at first. You would be wise to train a small number of insightful teachers to serve as coaches for one another as they get used to the process themselves. Invite five or six other teachers to monitor this process and give feedback on what is going well and what might need to be redesigned to fit your school’s needs. Phase in more and more faculty over the course of the implementation. It will be important for the administrative team to be clear that all faculty members will eventually be expected to be involved.

Some faculty could decide not to refer students. If all students are doing well in the class, then, of course, there is no problem. The teacher basically has two legitimate choices: find a way to provide intervention with the IAT support or provide assistance another way. As long as a quality job gets done, there is no problem with which resources are used. Blaming someone else and “leaving that child behind” without the skills and knowledge is a big problem for everyone.

If some students are failing, it is the administrator's responsibility to start the conversation about how the teacher plans to address the problems.

Another phase-in process is to start with just the teacher involvement steps: analyzing the problem, goal setting, meeting to develop a plan of action, implementing and evaluating progress based upon data. These are the non-negotiable parts of problem-solving. Including the parent and student in the process could come later, if necessary. Don’t delay too long in involving both the parent(s) and the student, since their involvement significantly shortens intervention time and creates better relationships with community.



Conclusion

Most teachers started with dreams of not just teaching kids who could be taught by anyone, but of being successful with students other teachers found too challenging. They would be able to motivate kids who never wanted to come to school before. They would be the teachers who would turn lethargic learners into animated ones. Their students would be amazed and proud of what they accomplished and learned.

Some teachers were lucky enough to be hired by the “Collaborative School,” where experienced and newly trained teachers taught each other, designed great lessons together, solved problems by creating interventions and enrichment opportunities, created engaging units of study and developed flexible ways of delivering instruction. These teachers probably came closer to realizing their dream of becoming master teachers each year they worked at this school.

Some teachers were hired by the “Isolation School,” where they were handed their textbooks, class rosters and expected to do their own thing. Many of these teachers have found that in the “Isolation School,” the following beliefs exist:

- Simply follow the texts and teach your favorite units. It's too much work to go beyond doing what we have always done. It's good enough.
- It's more comfortable to blame the kids and their parents for not being motivated than it is to see our jobs as ones in which we create motivation.
- It's easier to refer, label and jettison kids off to someone else's class than to try to solve learning and behavior problems within our classes.
- It's too time-consuming to plan and coordinate with other teachers. We have enough work of our own to do.

Meeting the needs of ALL students is exhausting and often frustrating work when teachers feel they are carrying the weight of the instructional world by themselves. Thoughts like these are not uncommon, even for good teachers who have not been surrounded by the strong support system of teams. Even in buildings where collaboration has been the norm, there will be staff members who are unaccustomed to thinking about using the professional resources around them to meet the needs of ALL students. The idea of accommodating and motivating every student may require shifts in thinking for some.

High-performing schools are not accidents, nor are they simply lucky enough to have hired the right teachers. High-performing schools are led by administrators with clear visions of what it takes to hit the mark of quality. They do not make or accept excuses for falling short; they develop a specific plan for making that vision a reality. These administrators know how to inspire people to accomplish things no one believed they were capable of doing. They help the faculty sort the important from the less important, rather than simply adding things to already “full plates.” They know when to direct, when to ask the hard-to-answer questions and when to get out of the way of people who are competent.

This book is designed to help administrators and faculties understand how the many complicated pieces of a high-performing school fit together. Trying to implement all the pieces at once may not be a solid plan for accomplishing a vision of quality. Taking steps to determine what is most critical for students is the logical starting place. The administrators must gauge the present capacity of the staff for change, and must determine the best ways for putting the essential elements into place. Often a three- to five-year plan makes the most sense.

As leaders, we know that focusing on a few things at a time increases the likelihood that true systemic change will occur. We also know that at the same time, we must carefully plan, and with input from staff, make decisions that will positively impact student achievement. Constantly reflecting on the needs and the growth of staff as standards-based instruction is implemented for all learners, not only results in professional development that is important, but staff that is empowered. Only when staff members work together to address the needs of all learners, can we call ourselves master administrators.



Glossary

“Access to the general curriculum” means providing an opportunity to learn the important content reflected in rigorous content standards. Access means different things for different students (Nolet and McLaughlin, 2000).

“Accommodations” are changes made in the way materials are presented or in the way students respond to the materials, as well as changes in setting, timing and scheduling, with the expectation that the student will reach the standard set for all students. (*Ohio’s Assessment System: Alternate Assessment for Students with Disabilities, 2003-2004, Administration Manual.*)

“Activity Bank” is a variety of activities designed to anticipate the diversity in any given class and enable all students to learn the skills and concepts of a given unit of study. These activities are designed to accommodate diverse styles, interests and levels of thinking

“Assessment” means the measuring of student achievement of performance goals and objectives. [*Operating Standards for Ohio’s Schools, Rule 3301-35-01(B)(1)*]

“Alternate Assessment” is an assessment designed for students with disabilities who are unable to participate in a regular assessment, even when accommodations are provided. (US DOE Non-Regulatory Draft Guidance, March 10, 2003)

“Authentic Assessment” allows teachers to see students’ thinking processes by challenging them beyond recall to application, refinement and reflection levels. These assessments should be designed so the target indicators can be clearly observed, but at a variety of sophistication levels and using several different styles. They can be designed as one task or a series of smaller related tasks that can be assessed in steps.

“Diagnostic Assessment” is a test designed to measure student comprehension of academic content standards and mastery of related skills for the relevant subject area at each grade, kindergarten through eighth. [Ohio Administrative Code 3301-51-01(A)(5)] Diagnostic assessments are administered to give teachers and parents detailed information as to the strengths and weaknesses of individual students. They provide teachers with important information for instructional planning. They also help identify students needing additional help meeting the content standards and preparing for the achievement tests. (*Ohio’s Academic Content Standards*)

“Formal Assessment” includes all types of standardized testing, as well as unit and teacher-made tests. (*Differentiated Instruction Practice Series, Video and Viewer’s Guide*, National Professional Resources, Inc., 2003)

“Formative Assessment” is analogous to “dip-sticking” – a simple check for growth along the way.

“Informal Assessment” incorporates observation, conferencing and various kinds of performance assessments such as reports, demonstrations and performance. (*Differentiated Instruction Practice Series, Video and Viewer’s Guide*, National Professional Resources, Inc., 2003)

“Summative Assessment” is a check to see if all the pieces are still there and are able to be applied and explained.

“Assessment Map” is an ongoing conversation among all faculty members who are charged with implementation of the standards for a given grade level or course about how the indicators will be clustered, focused and assessed. (See Chapter 1)

“Baseline Data” describes the starting point for instruction regarding a skill or behavior from which change can be measured.

“Backward Design” is the process of designing lessons by starting with the question, “What are the students going to be able to know and do by the time we are finished with this unit of study?” The teacher may start by planning the assessment or by listing the essential understandings, skills and concepts before deciding which activities and resources to use.

“Benchmark” means a specific statement of what all students should know and be able to do at a specified time in their schooling. Benchmarks are used to measure a student’s progress toward meeting the standard. (*Ohio’s Academic Content Standards*)

“Chunking” is a strategy for helping students see the relationships among the concepts and skills being taught. It also relates what is being taught to prior knowledge and experience of the student (e.g., mnemonic devices, charts, patterns and analogies).

“Consultant System” is a plan that arranges for two or more teachers to plan lessons together developing necessary accommodations to help all students be successful in meeting their goals. The teachers may implement these plans independently.

“Co-Teaching” is a strategy in which two or more teachers plan and work together jointly to meet the needs of all students. Generally, they deliver these plans as a team.

“Curriculum” means the way content is designed and delivered. (Ohio Department of Education, Center for Curriculum and Assessment, Office of Curriculum and Instruction)

“Curriculum Mapping” is the process developed by Heidi Hayes-Jacobs (1997) used by individual teachers to show how the content, skills and assessments will unfold over the course of a year. This differs from an assessment map in two ways:

1. It is a personal teaching plan rather than a group-developed one.
2. It shows where things will be *taught* rather than where indicators will be assessed by the group-developed assessment. The teaching and assessing maps may coincide for some teachers, but teachers are free to introduce and extend ideas beyond the assessment map agreements.

“Differentiated Instruction” is a process to approach teaching and learning for students of differing abilities in the same class. To differentiate instruction is to recognize students’ varying background knowledge, readiness, language, preferences in learning, interests and to react responsively. The intent of differentiating instruction is to maximize each student’s growth and individual success by meeting each student where he or she is, and assisting in the learning process. (National Center on Accessing the General Curriculum)

“Essential Understandings” are full-sentence statements that identify the insights students are to be able to explain and demonstrate by the end of a unit of study. They are timeless and cultureless “life lessons” or patterns of the discipline.

“Essential Questions” are engaging, deep questions that lead a student to the insight of the essential understanding for the unit of study.

“General Curriculum” refers to the curriculum that is used with nondisabled children. [34 CFR Appendix A to Part 300, Ohio Administrative Code 3301-51-01(S)] It is whatever the regular education students are learning. (*What a Great IDEA! Effective Practices for Children with Disabilities*, Conference Materials, 2000)

“Grade-level Indicators” are specific statements of knowledge that all students demonstrate at each grade level. These indicators serve as checkpoints that monitor progress toward the benchmarks. (*Ohio’s Academic Content Standards*)

“Individuals with Disabilities Education Act (IDEA)” is the successor of Public Law 94-142, the federal “special education” law. Reauthorized in 1997, it requires that students with disabilities be involved in and progress in the general education curriculum, with needed accommodations and modifications, with nondisabled peers to the greatest extent possible.

“IMS” is Ohio’s web-based Instructional Management System, the vehicle for communicating Ohio’s State Board-adopted model curricula aligned with the academic content standards.

“Interventions” are strategies designed to address specific learning problems as identified by diagnostic assessment data.

“Intervention Assistance Team (IAT)” is a team that engages in a process for designing a support plan to help teachers, parents and students who are attempting to solve student learning problems and other related issues. The process assembles the most powerful resources to develop a plan and then assesses and modifies the plan as needed.

“Intervention Specialist” is a special education teacher. *Ohio’s Teacher and Education Licensure Standards*, effective January 1998 (updated 2003), makes provision for intervention specialist licenses to be issued in the following areas: mild/moderate educational needs; moderate/intensive educational needs; hearing impaired; visually impaired; gifted, and early childhood. These licenses replace former special education certificates that were issued based on categories of disabilities.

“Individual Education Program (IEP)” is a written commitment on the part of the school for the provision of specific services to be delivered in order to meet an individual student’s needs.

“KWL Charts” are graphic organizers that ask the students to list:

1. What they already **Know** about the topic being discussed;
2. What they **Want** to know about the topic;
3. What they **Learned** about the topic after the lesson is completed.

Some teachers add an “H” to the list, making the organizer a KWHL chart. The “H” asks **How** the student intends to find the information in the “W” section.

“Least Restrictive Environment (LRE)” is the environment in which learners with disabilities can succeed, which is most similar to the environment in which nondisabled peers are educated. Students with disabilities are to be removed from the general education setting only when the nature and severity of their disability is such that education in that setting, with appropriate aids and services, cannot be achieved satisfactorily. (*Inclusion: A Service, Not A Place*, Alan Gartner and Dorothy Kerzner Lipsky, 2001)

“Lesson Plans” are used to guide instruction and focus on what is to be learned. Sample standards-based lesson plans are available on the IMS.

“Learning Styles” means how students access, process and express information most easily. The learning-style model developed by Rita and Ken Dunn classifies learning styles and learners as auditory learners, visual learners, tactile learners, kinesthetic learners and tactile/kinesthetic learners. (*Differentiated Instructional Strategies: One Size Doesn’t Fit All*, Gayle H. Gregory and Carolyn Chapman, 2001)

“Modeling” is a strategy that allows the student to see an example of how the desired learning can be demonstrated. Often the teacher verbalizes what questions and thinking processes an effective learner uses as he/she goes step-by-step through the learning process.

“Model Curriculum Program” means a non-binding, sample curriculum provided by the Ohio Department of Education that contains a scope and sequence of course objectives that are aligned with academic content and performance standards. [*Operating Standards for Ohio’s Schools*, Rule 3301-35-01(B)(9)]

“Modification” means change made to the content that students are expected to learn where amount or complexity of materials is significantly altered from grade-level curriculum expectations. (*Ohio’s Assessment System: Alternate Assessment for Students with Disabilities, 2003-2004, Administration Manual*)

“No Child Left Behind (NCLB)” is the legislation that holds educators accountable for the academic growth of every child.

“Ohio Graduation Tests (OGT)” are the achievement tests, aligned with academic content standards, designed to measure the level of skill expected at the end of the 10th grade in writing, reading, mathematics, social studies and science. [Ohio Administrative Code 3301-13-01(A)(11)] These tests will eventually replace the Ohio Ninth-Grade Proficiency Tests and ensure that students who receive a high school diploma demonstrate at least high school levels of achievement.

“Parallel Teaching” is a system where teachers are planning together and working together to meet student needs. In this system, the same indicators are being worked on in different groups and generally in different rooms. Student grouping is flexible and is shared among the partner teachers.

“Paraprofessionals” are instructional staff hired to support student learning, who do not necessarily hold a teaching certificate or license.

“Power Indicators” are the indicators that serve as the building blocks around which many other smaller indicators are easily clustered. These indicators lend themselves to authentic assessment and will most likely be included as important skills on the state achievement tests.

“Research-based Strategies” are teaching techniques backed by valid, scientifically-based research studies that have been proven to be effective.

“Rubrics” are scoring guides that provide a breakdown of the specific criteria the teacher intends to use to judge the quality of the work submitted. It often provides a descriptive scale for various levels of performance (e.g., beginner – sentences are short and have few sensory words; adequate – sentences vary in length and have several sensory words; advanced – sentences are a mix of simple, complex and compound and sensory words are plentiful and powerful). When given to students before the assignment, rubrics tend to focus students on the important aspects of learning.

“Standard” is a general statement of what all students should know and be able to do. (*Ohio’s Academic Content Standards*)

“Standards-based Education” is a process for planning, delivering, monitoring and improving academic programs in which clearly defined academic content standards provide the basis for content in instruction and assessment. In standards-based education, the standards help to ensure that students learn what is important, rather than allowing textbooks to dictate classroom practice. Student learning is the focus of standards-based education. Standards-based education aims for a high and deep level of student understanding that goes beyond traditional textbook-based or lesson-based instruction.

Although standards define individual skill, standards-based education does not promote a skill-by-skill methodology. Multiple standards can and should be integrated in instructional activities. (Ohio Department of Education, Instructional Management System)

Bibliography

- Archer, Anita. *Skills for School Success*. Sopris West, 2000.
- Armstrong, Thomas. *7 Kinds of Smart*. Plume/Penguin, 1993.
- Black, P.J., and D. Williams. *Assessment of Classroom Learning*. *Assessment in Education: Principles, Policy and Practice* (Vol. 5, No. 1, pp. 7-74), 1998.
- Blanchard, K., and P. Zigarmi. *Situational Leadership: Different Strokes for Different Folks*. *Principal* (Vol. 66, No. 4, pp. 12-16), 1987.
- Bransford, J.D., Brown, A.L., and R.R. Cocking. (with additional materials from the Committee on Learning Research and Educational Practice-Donovan, M.S.) *How People Learn: Brain, Mind, Experience. Commission on Behavioral and Social Sciences and Education, National Research Council*. National Academy Press, 2000.
- Bruner, J.S. *The Process of Education*. Cambridge: Harvard University Press, 1960.
- Burke, Kay. *How to Assess Authentic Learning*. Skylight, 1999.
- Campbell, Linda and Bruce, and Dee Dickinson. *Teaching and Learning through Multiple Intelligences*. Allyn and Bacon, 1996.
- Cole, Sandy, et al. *Adapting Curriculum and Instruction in Inclusive Classrooms*. Indiana Institute on Disability and Community, 2000.
- Crooks, R.J. *The Impact of Classroom Evaluation Practices on Students*. *Review of Educational Research* (Vol. 58, No. 4, pp. 438-448), 1998.
- Deal, R.E., and K.D. Peterson. *The Principal's Role in Shaping School Culture*. U.S. Government Printing Office, Washington, D.C., 1990.
- Differentiated Instruction Practice Series: Video and Viewer's Guide*. National Professional Resources, Inc., 2003.
- Edmonds, R. *Effective Schools for the Urban Poor*. *Educational Leadership* (Vol. 37, No. 1, pp 15-24), 1979.
- Friedkin, N.E. and M.S. Slater. *School Leadership and Performance: A Social Network Approach*. *Sociology of Education* (Vol. 67, pp. 139-157), 1994.
- Friend, M., and L. Cook. *Interactions: Collaboration Skills for School Professionals* (4th edition). Allyn and Bacon, Inc., 2002.

- Fullen, M. and A. Hargreaves. *What's Worth Fighting for in Your School?* Teachers College Press, 1996.
- Gartner, Alan and Dorothy Kerzner Lipsky. *Inclusion: A Service, Not A Place*. National Profession Resources, 2001.
- Giangreco, M.F. *Working with Paraprofessionals*. *Educational Leadership* (Vol. 61, No. 2, pp. 50-53), 2003.
- Goleman, D. *Emotional Intelligence: Why It Matters More than I.Q.* Bantam Books, 1995.
- Gregory, Gayle H. and Carolyn Chapman. *Differentiated Instructional Strategies: One Size Doesn't Fit All*. SAGE Publications, 2001.
- Guskey, T.R. and J.M. Bailey. *Helping Standards Make the Grade*. *Educational Leadership* (Vol. 59, No.1, pp. 20-27), 2001.
- Harmin, Merrill. *Inspiring Active Learning: A Handbook for Teachers*. Association for Supervision and Curriculum Development, 1994.
- Hunter, M. *Mastery Teaching*. SAGE Publications, 1982.
- Hyerle, David. *Visual Tools*. Association for Supervision and Curriculum Development, 1994.
- Jacobs, Heidi Hayes. *Mapping: The Big Picture: Integrating Curriculum and Assessment, K-12*. Association for Supervision and Curriculum Development, 1997.
- Kallick, Bena. *TechPaths for Math*. Technology Pathways, 1998.
- Kulic, C.C. and J.A., and R.L. Bangert-Downs. *Effectiveness of Mastery Learning Programs: A Meta-Analysis*. *Review of Educational Research* (Vol. 60, No. 2, pp. 265-299), 1990.
- Lewin, Larry, and Betty Jean Shoemaker. *Great Performances: Creating Classroom-Based Assessment Tasks*. Association for Supervision and Curriculum Development, 1998.
- Lortie, D.C. *Schoolteacher: A Sociological Study*. The University of Chicago Press, 1975.
- Lou, Y., et al. *Within-Class Grouping: A Meta-Analysis*. *Review of Educational Research* (Vol. 66, No. 4, pp. 423-458), 1996.
- Marzano, Robert, et al. *A Handbook for Classroom Instruction that Works*. Association for Supervision and Curriculum Development, 2001.
- McTighe, Jay, and Grant Wiggins. *Understanding by Design Handbook*. Association for Supervision and Curriculum Development, 1998-1999.
- Nolet, V. and M.J. McLaughlin. *Accessing the General Curriculum: Including Students with Disabilities in Standards-Based Reform*. Corwin Press, 2000.
- O'Connor, Ken, and Richard Stiggins. *How to Grade For Learning*. Skylight, 2002.

- Ohio's Assessment System: *Alternate Assessment for Students with Disabilities, 2003-2004 Administration Manual*. Ohio Department of Education.
- Operating Standards for Ohio's Schools*, Chapter 3301-35. Ohio Administrative Code.
- Purky, W., and D. Strahan. *Research in the Schools: School Transformation Through Invitational Education*. Middle School Journal, Fall, 1995.
- Reeves, Douglas B. *101 Questions and Answers about Standards, Assessment and Accountability*. Advanced Learning Press, 2001.
- Senge, Peter M. *The Fifth Discipline*. Doubleday, 1990.
- Silver, Harvey, et al. *So Each May Learn, Integrating Learning Styles and Multiple Intelligences*. Association for Supervision and Curriculum Development, 2000.
- Sousa, David A. *How The Brain Learns*. National Association of Secondary School Principals, 1995.
- Standards and Assessments: Non-Regulatory Draft Guidance*. United States Department of Education. March 10, 2003.
- Stiggins, Richard. *Assessment for Learning*. Education Week. March 13, 2002.
- Stiggins, Richard. *Student-Involved Classroom Assessment*. Merrill Prentice Hall, 2001.
- Strong, Richard, et al. *Teaching What Matters Most: Standards and Strategies for Raising Student Achievement*. Association for Supervision and Curriculum Development, 2001.
- Sylwester, R. *A Celebration of Neurons: An Educator's Guide to the Human Brain*. Association for Supervision and Curriculum Development, 1995.
- Teacher Education and Licensure Standards* (Adopted October 15, 1996; Effective January 1, 1998; Updated January 1, 1999 and January 1, 2003). Ohio Department of Education.
- Tomlinson, Carol Ann. *How to Differentiate Instruction in Mixed Ability Classrooms*. Association for Supervision and Curriculum Development, 1995.
- Tomlinson, Carol Ann. *The Differentiated Classroom: Responding to the Needs of All Learners*. Association for Supervision and Curriculum Development, 1999.
- Twomey Fosnot, Catherine, and Maarten Dolk. *Young Mathematicians at Work*. Heinemann, 2002.
- VanOverwalle, F., and M. DeMetsenaere. *The Effects of Attribution-Based Intervention and Study Strategy Training on Academic Achievement in College Freshmen*. British Journal of Educational Psychology (Vol. 60, pp. 299-311).
- What a Great Idea! Effective Practices for Children with Disabilities Conference Materials*. ASPIIRE and ILIAD IDEA Partnerships, 2000.

Wolfe, Patricia. *Brain Matters: Translating Research into Classroom Practice*. Association for Supervision and Curriculum Development, 2001.

Web sites:

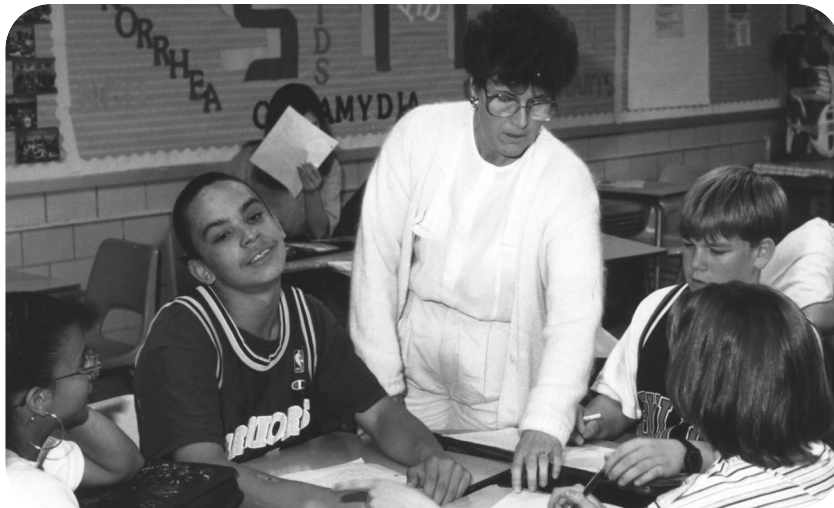
<http://www.Exemplars.com>

<http://www.Ohiorc.org>

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