

# Co-Teaching: Beyond the Basics

***Resources and Related Materials***  
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## **Effective and Sustainable Co-Teaching: Next Steps**

Co-teaching offers options to enable students with disabilities and other special needs to reach their potential by providing them with access to the general education curriculum while ensuring that they receive the specially designed instruction to which they are entitled. When teachers carefully analyze their complementary areas of expertise and blend those unique strengths, they create classrooms that are richer, more intensive, and more tailored to address student needs. However, co-teaching partnerships are developmental, and even experienced co-teachers can continue to increase their knowledge and refine their skills.

The purposes of this professional development session are to address questions that you have related to the co-teaching practice you have been implementing since our previous professional development session, to extend concepts already introduced with elaborated ideas and strategies, and to add techniques, especially those related to increasing instructional intensity. One key assumption is that you have already participated in a basic co-teaching professional development session (either last time or at another time); the intent is to move beyond the fundamental information provided in such sessions.

### **Agenda**

1. Analysis of the current status of your co-teaching practice, including evidence of its effectiveness.
2. Assessment of your use of the six co-teaching approaches and plans for extending your practice.
3. Discussion of the use of effective instructional practices in co-taught classes, including these dimensions and using this book as a resource:
  - Assessment and planning;
  - Content, materials, and technology;
  - Instructional environment;
  - Teaching practices;
  - Student participation and involvement;
  - Evaluation of student learning;
  - Partnerships among the teachers and other staff members.
4. Responses to co-teaching issues and concerns you are experiencing.

## Checking Up on Co-Teaching Fundamentals

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When you learned about the basics of co-teaching, many dimensions of this service delivery option were addressed. The following set of questions is designed to assist you in considering the current status of your practice, including areas in which you are experiencing success and those in which you are finding barriers or challenges. Note that the six co-teaching approaches are addressed in a separate exercise.

1. How often do you have conversations with your co-teacher concerning the unique expertise that each of you brings to the classroom? As you reflect on your current practice, what percentage of each person's knowledge and skills are being utilized? What is the basis for your response? You might want to answer separately for your partner and yourself and then compare answers.
2. If someone came to visit your classroom with the goal of determining the extent to which parity exists between you, what specific indicators of parity would be found? What signals might suggest parity is incomplete?
3. How satisfactorily are responsibilities in the co-taught class divided? Preparation? Behavior management? Chores? How would you like to see this division change going forward?
4. How have you addressed the matter of accountability? If a parent asked to see lesson plans that indicated the delivery of SDI, what would you share? How are these plans being prepared?

## *Checking Up (continued)*

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5. If a guest observed in your co-taught class, to what extent would that person notice that your students are completing a variety of tasks tailored to address their specific learning needs?
  
6. To what extent do you re-arrange furniture to facilitate co-teaching? What other classroom arrangements are you making to ensure your co-teaching is efficient and effective?
  
7. What have you taught students about co-teaching? Do they know the approaches? Do they move easily from group to group? Do they respond similarly to both teachers? Do they know why they have two teachers?
  
8. How are you using data to measure student progress, to make decisions about grouping students for instruction, and to frequently monitor students' attainment of IEP goals (and, as appropriate, objectives)? What outcomes have occurred in terms of student achievement? Other measures?
  
9. When you think about your co-teaching practice, in what ways would you consider it particularly effective? In what ways do you perceive the practice should continue to grow?

## Co-Teaching Approaches: Where Are You Now?

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Actual %

Ideal %

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**One Teach, One Observe.** One of the advantages in co-teaching is that more detailed observation of students engaged in the learning process can occur. With this approach, for example, co-teachers can decide in advance what types of specific observational information to gather during instruction and can agree on a system for gathering the data. Afterward, the teachers should analyze the information together.

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**Station Teaching.** In this co-teaching approach, teachers divide content and students. Each teacher then teaches the content to one group and subsequently repeats the instruction for the other group. If appropriate, a third "station" could give students an opportunity to work independently.

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**Parallel Teaching.** On occasion, students' learning would be greatly facilitated if they just had more supervision by the teacher or more opportunity to respond. In parallel teaching, the teachers are both teaching the same information, but they divide the class group and do so simultaneously.

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**Alternative Teaching:** In most class groups, occasions arise in which several students need specialized attention. In alternative teaching, one teacher takes responsibility for the large group while the other works with a smaller group.

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**Teaming:** In teaming, both teachers are delivering the same instruction at the same time. Some teachers refer to this as having "one brain in two bodies." Others call it "tag team teaching." Most co-teachers consider this approach the most complex but satisfying way to co-teach, but it is the approach that is most dependent on teachers' styles.

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**One Teach, One Assist.** In a second approach to co-teaching, one person would keep primary responsibility for teaching while the other professional circulated through the room providing unobtrusive assistance to students as needed.

100%

100%

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# The Vocabulary of Instruction

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## Universal Design for Learning

Based on principles now applied in architecture and product design in order to ensure compliance with the Americans with Disabilities Act, universal *design for learning* is the concept that as educators design instruction, they should incorporate structures so that nearly all learners can access that instruction and benefit from it. Thus, just as city engineers now ensure that all sidewalks have curb cuts so that people who use wheelchairs can easily access sidewalks, teachers are charged with planning lessons with instructional “curb cuts” so that even students who struggle with reading or who experience difficulty with behavior or who have sensory disabilities can succeed. With this mindset, “disabled” is not seen as a separate category of learner but rather as a variation on a broad continuum of expected diversity.

## Differentiated Instruction

The phrase *differentiated instruction* has become a buzzword for twenty-first century educators. In many ways it is the implementation of the principles of universal design for learning. Based on assessment so that individual student needs are the focus, differentiation instruction is proactively designing instruction so that each student can access the instruction, process and make meaning of it, and demonstrate their mastery of it. Many models for differentiation have been offered, and Friend’s (2009) model will be the basis for this workshop. Another simple model directs teachers to consider how they can change *input*, *process*, and *product* as dimensions of differentiation.

## Supplementary Aids and Services: Examples

Supplementary aids and services (SAS) comprise a very broad set of supports for students with disabilities that enable them to be successful in the general education setting. SAS are required by IDEA, and the law indicates that, for nearly all students, before a placement more restrictive than the general education setting is proposed, evidence must be provided that the student was provided with SAS and that data indicate those supports have not been effective in assisting the student to meet IEP goals (and, for some, objectives).

## Modifications

Significant changes made to the curriculum in order to enable a student to be successful in a general education environment are called modifications. It is important to realize that modifications pertain to changing curricular objectives; the concept is not essential for considering accommodations made in students’ daily work. Although modifications can include a change in sequence (for

## *The vocabulary of instruction (continued)*

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example, the order in which math facts are taught) or the addition of curriculum (for example, instruction in Braille for students with vision impairments), more commonly they pertain to significant reductions in the traditional curriculum (for example, eliminating all but four of the 15 vocabulary words because only those four seem to have life application for the student in question). Modifications generally should be reserved for students with intellectual or other disabilities so significant that they are not expected to meet the same curriculum standards as other students (that is, no more than 2-3 students with disabilities out of every 10). For some students with more mild disabilities, however, educators still find that, because of shortcomings of past instructional practices, they still need modifications. These should be offered with great reluctance and with a plan to decrease modification over time. Some professionals think of modifications as changing **what** the student learns.

### **Accommodations**

Accommodations are instructional tools that enable a student with special needs to more readily access curricular content or to more easily demonstrate understanding of that content. Many students use accommodations, whether they have identified disabilities or not. One simple example of an accommodation is using a calculator during math instruction because basic facts are not known, and this interferes with the new learning. Another is providing extended time for students to complete lengthy assignments. Accommodations continue after graduation for students with disabilities who choose to identify themselves thus; the Americans with Disabilities Act requires “reasonable accommodations.” Some professionals think of accommodations as changing **how** the student learns the same curriculum as other learners.

### **Specially designed instruction (SDI)**

SDI is one of the fundamental rights of students with disabilities. It is the instruction that is directly matched to their specific needs as determined by individualized assessment. SDI is specified on the IEP and legally it must be provided. The challenge in a co-taught setting is to ensure that SDI is provided to students with disabilities. SDI may occasionally overlap with differentiation techniques, but its key distinction is its direct relationship to assessed student needs.



## ❖ **Co-Teaching and Specialized Instruction**

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A central concept for co-teaching, but one that seems often to be overlooked, is that co-teaching is the vehicle through which students' specialized services are delivered. Too often, co-teachers comment that their emphasis is one of the following instructional components...and co-teaching must be much more than these or it cannot be justified:

- General support for learning (special educators and ESL teachers have far too many skills to be classroom helpers)
- A strategy for differentiating (all teachers should differentiate; co-teaching should add more value to the classroom than that)
- Accommodations for students with disabilities (again, general education teachers are expected to provide accommodations because they are designed to be implemented to support students in general education; by themselves, they are not a reason for a special educator to be a teaching partner)

Even more important is the fact that none of the above activities constitutes the delivery of the specialized instruction students are entitled to receive. For students with disabilities, it is specially designed instruction that is based on the following:

- Student assessed needs (present level of performance as well as durable assessed characteristics such as difficulty with short-term memory)
- IEP goals (and possibly, objectives)
- Changes in content, methodology, or delivery of instruction
- Instruction that is deliberate, that is, planned, documented, and evaluated
- Provision of access to the general curriculum
- Knowledge and skills of the special educator are required

For English language learners, it is the instruction that enables students to both be learning English as well as mastering the curriculum standards.

When students receive their services in separate settings, seldom is any question raised about specialized instruction. When students are educated with peers without special needs in general education settings, professionals must be clear on how the required services are being delivered.

Based on the students with whom you work, what are examples of specialized instruction needed (being careful to distinguish it from the items noted above)? How can this specialized instruction be embedded into the instruction that occurs (large group or small group) in a general education setting?



## Differentiating/Providing Specialized Instruction in a Co-Taught Class

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Co-teaching serves as a type of differentiating in and of itself. However, within a co-taught class, teachers should continue to make efforts to provide students with several options for learning so that they can maximize their success, and students with disabilities should receive specially designed instruction. Here is how it works:

1. Co-teachers should review the curriculum material that must be addressed.
2. They should then consider how to best group students in order to facilitate student learning (e.g., whole group-teaming? two groups-parallel teaching? small groups? stations?).
3. The teachers should also take into account their knowledge of students' strengths, interests, and learning needs to determine how to best teach the required material.
4. They should then consider how they can meet a variety of student needs through differentiating, using the six dimensions that are presented elsewhere in this material: varying the environment, the content, the way in which information is taught, the way in which students interact with material in order to master it, and way in which student learning is evaluated, and the way the adults work together.
5. In addition to that differentiation, co-teachers should discuss the SDI to be provided toward reaching IEP goals and objectives.
6. No single correct approach to instruction exists for co-taught classes. The key is to be sure that all six dimensions are considered.
7. Technology often can assist teachers in differentiating as well as in providing SDI. Using computer software that facilitates student writing, provides a means for creating organizers, or provides alternative activities can greatly facilitate student learning. For some students, such options are required.
8. If adjusted materials are needed as part of differentiating, the special educator often will create those materials or locate those that are commercially available. If rubrics are needed for various types of assignments, both teachers typically make decisions about the rubrics.
9. In co-taught classes, not all students do the same work at all times. Having a different assignment is the norm, not the exception. Similarly, whole-group is just one of many approaches, not the dominant one.

# Bloom's Taxonomy as a Basis for Instructional Design

As you think about various ways to ensure that the instruction in your class is designed to meet the entire array of diverse student learning needs, one helpful tool is Bloom's taxonomy. This model, specified in the center circle, provides a convenient way to identify ways to challenge learners to reach their potential. The second circle includes verbs that relate to each of the six levels of the model, and the outer circle captures products students might produce related to each level of learning.



# A Framework for Instructing Diverse Learners

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Differentiation/specialized instruction can occur in most aspects of instruction. The following seven areas are especially important.

- 1. How preparation for instruction occurs.** This area includes assessment of general student strengths and needs as well as those specific to the instruction. It also includes a clear planning process so that instruction is deliberate and designed to address student needs, including IEP goals.
- 2. How content, materials, and technology are part of instruction.** This area includes the books, manipulatives, and other materials students use during instruction as well as the instructional and assistive technology that facilitates learning. It is also the dimension that teachers discuss related to modifications for a small number of students.
- 3. How the instructional environment is arranged.** Many factors affect learning even though not necessarily directly related to instruction. Examples include physical environment, classroom climate, and the availability of other supplies.
- 4. How instructional content is structured and presented.** Techniques teachers deliberately use during large-group, small-group, and individual instruction to foster student learning are essential. Many students learn strategies as part of curriculum delivery.
- 5. How students learn the instructional content.** This encompasses strategies students use to relate instructional content to other learning, to identify and hold the most important aspects of it, to remember it, and to use it are part of this area. These strategies increase student motivation.
- 6. How student learning is evaluated.** The fifth area includes alternative approaches for assessing student learning and options for grading students on daily work as well as on report grades. In co-taught options, alternative assessment strategies are often more feasible than in other settings.
- 7. How the adults work together.** Strategies for facilitating instruction include consultation, preparation of materials/strategies by special educators or others, co-teaching, in-class services from paraprofessionals and others, intervention assistance and other teams, and systematic problem solving.

# 1. Preparation for Instruction

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Although few options remain for teachers to select curriculum content, they still have the responsibility for prioritizing what students should know. Decisions about the selection of content should be based on assessed student needs and related factors, and the decisions should not be identical for each student. If small pieces of content are deleted, this is considered a usual adjustment. However, if major or core segments of curriculum are deleted, this is a modification of curriculum and might require a change in learning assessment procedures. This level of change should be primarily for students with significant intellectual disabilities; other students rely primarily on accommodations.

Remember that decisions about content should be based on ongoing assessment of student learning. Here are some questions that can help you make decisions about the content of instruction for students with exceptional needs:

- Based on our understanding of this student (from IEP, past experience, current indicators), what is a reasonable expectation for learning the key components of this instruction?
- What are the characteristics of each student that can inform us about the amount of content a student can learn and how s/he can best learn it?
- Based on our professional knowledge and experience, which required competencies or standards does this instruction address?
- Is this an activity in which the student can learn a skill related to the IEP, regardless of whether or not he or she learns the intended instructional content?
- How critical is this content in terms of helping this student acquire skills for getting a job/career? Job-related skills are learned beginning in kindergarten, and teachers can foster the learning of such skills throughout a student's school career.
- How critical is this content in terms of helping this student learn skills to make constructive use of recreational time?
- How critical is this content in terms of helping this student learn social skills for both vocational and personal situations?
- How can this curricular content be made appropriate for this student?

## Assessment for Learning

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General assessments of learner styles, preferences, and interests have value, but it also is important to have simple ways to assess students' knowledge of specific topics prior to instruction. Here are several assessment activities that can help teachers determine their students' background knowledge and/or readiness for the new instruction:

- Peoplegraph

Ask students a provocative question about the unit or topic about to be addressed. Then have them line up along a wall/whiteboard that has been labeled with a scale (e.g., low to high, 0 to 10). For example, "To what extent to you believe that global warming is occurring as a result of the actions of humans?" Students should be prepared to explain the basis for the strength of their opinion.

If you wish, this activity can be turned into a discussion tool. If you "fold" the line in half, the most opinionated students will be partnered, then the next more opinionated, and so on. Students can discuss their views with classmates and then participate in a large-group discussion.

- K-W-L

Many educators have used K-W-L as an efficient and effective assessment prior to instruction. It is based on these questions:

1. What do I know?
2. What do I want to know?
3. What did I learn (after instruction)?

This activity can be completed by students individually, working with a partner, working with a small group, or as a whole-class activity.

- Anticipation guide

Prepare a set of questions that capture key points to be made during your instruction. Then ask students to indicate whether they agree or disagree with the statements. To use this activity as an instructional tool, students can keep their guide and, as they read the material or complete the unit, indicate what the author said or what is factual. If students are reading a book, they can indicate the page on which they found the answer. An example of an anticipation guide is included on the next page.

## Anticipation Guide: Science Example

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Name \_\_\_\_\_

Date \_\_\_\_\_

### Anticipation and reaction guide

Use the following anticipation guide to preview your reading assignment (first column).

- Before reading, mark whether you agree or disagree with each statement.
- After reading, fill in the page number where you found the answer to each statement,
- Reflection: were you correct? If not, what did you learn?

Statement	Agree/disagree	Page	Reflection
A skier going down hill gains both potential energy and kinetic energy.			
Water held in a lake behind a dam does not have energy until it starts moving.			
Fossil fuels include petroleum, coal and natural gas.			
When a rolling soccer ball slows down, its kinetic energy is lost forever.			
Appliances that are more energy efficient should run cooler than others.			

Many examples of anticipation guides can be found with a quick search of the Internet. One site that has examples that span many subject areas and grade levels is this one:

[https://www.google.com/search?q=anticipation+guide+examples&rlz=1C1LENP\\_enUS478US478&es\\_sm=93&tbm=isch&tbo=u&source=univ&sa=X&ei=6BxdU-WCCtTKsASy6IHgCw&ved=0CCoQsAQ&biw=1242&bih=607](https://www.google.com/search?q=anticipation+guide+examples&rlz=1C1LENP_enUS478US478&es_sm=93&tbm=isch&tbo=u&source=univ&sa=X&ei=6BxdU-WCCtTKsASy6IHgCw&ved=0CCoQsAQ&biw=1242&bih=607)

The following website provides a succinct set of instruction for creating and using anticipation guides:

<http://olc.spsd.sk.ca/De/PD/instr/strats/anticiguide/index.htm>

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## 2. Instructional Materials

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### Adding Color

Some students, particularly those with attentional problems and learning disabilities respond well when color is used to help them focus attention

- Use highlighting markers to call out key words, directions, and potential trouble spots. For example, if the directions on an assignment sheet say to "Find three inferences in the first part of the chapter that tell you where it took place," you might highlight the words "three inferences" and "where it took place."
- A marker can also be used to indicate to a student which part of an assignment to complete. Some secondary teachers use a black marker as a key tool for making accommodations and other adaptations for students. They mark which items to focus on during tests, eliminate some parts of assignments, and otherwise adjust student work (ALL students' work, as needed) as they distribute assignments.
- Highlighters (or highlighting tape) also can be used to make textbooks easier to read. For example, use yellow marker to call out new vocabulary words, use pink marker to call out definitions of key vocabulary, and use green marker to call out key ideas. Generally, it is not recommended to have students read and highlight text since they tend to not read carefully when doing both tasks. Also, it is important not to highlight too much--no more than 1-2 sentences for each 2-3 paragraphs should be highlighted. (Remember classmates in college whose books were essentially all yellow? What assistance did that provide for learning?)

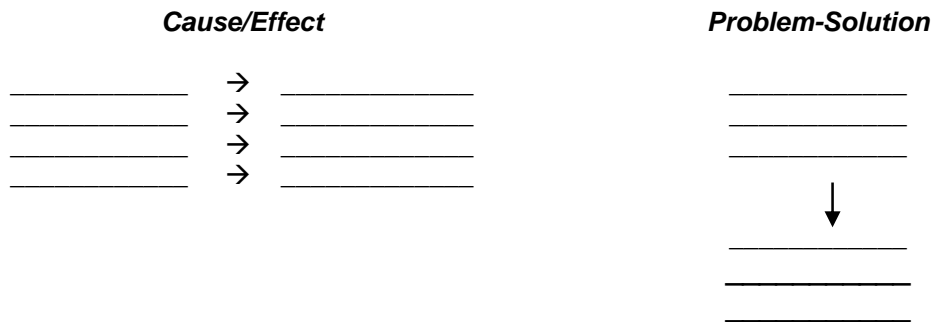
### Using Pictures and Graphics

Pictures and other graphics can greatly assist students in their learning. Most teachers already know about concept maps and webs. Here are a few other examples of using visuals.

- If students need to follow multiple directions, use small pictures as cues when directions are posted on the whiteboard (e.g., a pen for write sentences; a check mark to remind students to check their work).
- Try using graphics to help students understand different types of expository text. For example:

## *Instructional materials (continued)*

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### **Comparable Materials**

In many cases, materials can be adjusted so that curricular goals are preserved but student success is enhanced. A few examples include these:

- A word bank to use for test items that require filling in blanks or writing an essay.
- Assignments shortened so that students address all curriculum competencies but have fewer examples of each so that they can more readily complete the work
- A novel, piece of poetry, or story that addresses the same English concepts but that has simpler vocabulary (e.g., No Fear Shakespeare)
- Access to the wealth of high/interest low vocabulary materials that are available from commercial publishers
- Use of the alternative activities/recorded materials that often are included in teachers manuals for core curriculum materials

### **Using the Same Materials with a Different Goal**

Sometimes students with significant disabilities can use the same materials as classmates, but for a different purpose. A science lab might be fine motor skill practice for one student, not really a science lesson at all. A group discussion might be practice in making eye contact and initiating conversation rather than understanding the theme of the novel.



## **Technology Tools**

Technology can make it possible for students who struggle to read, who have difficulty attending, or who are not particularly intrinsically motivated to participate to experience success. More examples of instructional technology exist than can possibly be listed. Here are just a few examples:

- <http://www.bookshare.org/>

The federally funded site stores many thousands of digitally recorded material with an emphasis on books. The site includes a section specifically for K-12 education, and the items can be downloaded to a variety of devices. The service is free for any student who has a print-related disability, but the student must be enrolled in the service.

- <http://diigo.com>

Diigo is a research site that began with a goal of social bookmarking. It enables users to permanently highlight and annotate materials from websites and to share that information with others. The materials are immediately accessible through the website. This is a valuable tool for guiding students through readings and for teaching students to conduct research.

- <http://voki.com>

This is a site that enables students (and teachers) to create simple avatars that then can be given voice. The avatars can be exported through e-mail or uploaded to websites or other social learning platforms. Examples of the use of Voki include allowing students to give a “speech” by having the voki read it or creating vokis for vocabulary words.

### **3. The Instructional Environment**

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The environment in which instruction occurs has a strong influence on students' learning. When students and teachers perceive the classroom as attractive, safe, not distracting, and supportive, student learning is optimized. If students sense they are not welcome, or if the classroom environment fosters inappropriate behavior and detracts from learning, problems are likely to occur. Further, in co-teaching the environment should be arranged so that both teachers can actively work with student groups while ensuring that noise and distractions are kept to a minimum. This may be challenging in overcrowded settings, but still should be a priority.

#### **Classroom arrangement for co-teaching**

These are a few questions to consider for setting up a classroom for co-teaching:

- Are we taking full advantage of all the space in the classroom?
- How can we arrange the students and teachers so that student attention can be maximized and interfering noise can be minimized?
- How can we get the teachers seated during instruction so that voices do not carry as much?
- What instructional materials can facilitate the use of space (e.g., small whiteboards)?
- What physical arrangement should we use when implementing each of the co-teaching approaches?
- How could we use other items in the classroom (e.g., flip charts, dividers) to enhance the instructional environment when groups are working?

#### **Physical arrangement of classroom floor space**

Some considerations about classroom arrangement are very pragmatic. Are pencil sharpeners and supplies in locations that all students can reach them (even from a wheelchair)? Is there enough room in aisles and around worktables so that students can move easily? Are the desks or tables for students high enough? Too high? Are areas where supplies are located away from student work areas to minimize distraction?

#### **Arrangement of student desks**

Unless furniture cannot be moved (e.g., lab stations), teachers should have at least 2 or more ways to arrange furniture for co-teaching, and these arrangements should be taught to students. They can move furniture prior to the start of a class and, as needed, put it back at the end. At the start of the

## *Instructional environment (continued)*

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semester, students should be taught and rewarded for efficiently re-arranging classroom furniture. Remember that it is also important to have options for students who need to work away from other students and for students who need more than one desk to work with focus.

### **Use of wall space and ceilings**

Attractively decorated walls can make classrooms have a welcoming learning environment. However, too much decoration can lead to student distraction. Displays that stay the same (for example, the schedule; monthly announcements) should be located in areas that students look at during large-group instruction. Three-dimensional, or unusual displays should be out of students' line of sight. Likewise, learning activities should be toward the rear or at the sides of the classroom. Some teachers decorate their classrooms by hanging student projects or other items (e.g., mobiles students made for a lab) on strings from the ceilings. This practice often interferes with learning for students with attentional problems.

### **Lighting**

Lighting can strongly affect student learning. If a student seems to prefer strong light, that student should sit where the light is brightest. In contrast, some students may prefer to be seated in a relatively dark part of the classroom. If you have a student with a hearing loss or a student with a vision impairment, you should ask a special educator about lighting preferences. The former student may need a bright area where sign language can be seen; the other student may need a low-light area because of the nature of the impairment.

### **Storage**

Student learning is enhanced when their attention is focused on tasks at hand and not drawn to materials, supplies, and personal belongings. If at all possible, arrange for students' belongings (e.g., coats, backpacks) to be out of sight, and put away materials for an upcoming science lab, the canned goods being collected for a school food drive, and the boxes of T-shirts for the upcoming pep rally. Occasionally you might work with a student with disabilities who needs additional storage space in the classroom. The space might be needed for large-print editions of books, manipulatives, adapted tools or devices, computer equipment, and the like. A special educator should be able to assist a classroom teacher in arranging for such space.

## **Classroom Climate**

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Classroom climate refers to all the factors that make the environment one that fosters learning or interferes with it. Although the physical arrangement of desks and other furniture affects climate, there are many more components not as readily recognized.

### **Noise**

Some noise in a classroom can be constructive. Too much noise can detract from learning. In co-teaching, teacher voice, student voice, and the noise generated in using materials and moving around the room all must be considered. For students who need quiet working time in a noisy classroom, try using old stereo or aviation headphones. Older students may use their iPod headphones...but with a device and music selected by the teacher. Make such an accommodation available to any student. Alternatively, permit distractible students to work in a quiet corner of the classroom. In some locales, quiet background music might help many students' learning. Be aware, though, that music may be distracting for some students.

### **Social environment**

In inclusive settings, it is essential for all class members to be treated with respect. This implies that all students are involved in classroom decision-making, students have opportunity to get to know all their classmates, and students all have status as full class members.

The social environment is also greatly affected by the extent to which teachers and students feel physically and psychologically safe in the classroom. In addition, the presence of a sense of classroom community (camaraderie, team spirit) can enhance student learning. Remember that some students with IEPs may need explicit instruction in social skills that foster such a climate.

### **Student grouping arrangements for instruction**

Students are grouped for co-teaching in a variety of ways. Sometimes they should be grouped heterogeneously. At other times groups may be homogeneous. At yet other times, groups should be formed based on student interests. Occasionally, groups will be formed randomly.

### **Use of instructional routines**

Most students need predictability in daily and/or weekly routines for instruction and other classroom activities. They also benefit from patterns for writing assignments, turning in homework, and the like. There is not a single best prescription of how classroom routines should look, the key is that they should exist and be readily identifiable to all class members. This is especially important for students with disabilities in the relatively active environment of co-teaching.

## 4. Presentation of Instructional Content

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There are many, many strategies for effectively presenting content to students, especially those with special needs, and facilitating student learning. Co-teachers should assess their own teaching styles and select one of ideas like the following to refine their teaching. These are a few of the most critical techniques for teacher-led instruction for students with disabilities. Think about how each could be incorporated into the co-teaching approaches and within the CCSS.

- **Clear instructional format following these steps:**

- a. Review of previous material
- b. Introduction of new material
- c. Provision of guided practice
- d. Provision of feedback and correction
- e. Practice

- **Tiering instruction.**

Another approach to teaching that can help you to meet student needs is tiering. Tiering can begin with instruction, but it also can continue through student participation as well as assignments given. The goal of tiering is to match concepts, questions, and assignments to the abilities and needs of students.

- **Use of pre-reading plans**

Using a pre-reading plan is a means for determining whether students have background related to the lesson about to be presented. For example, you might select two key vocabulary words, present them to students, and ask students to share what they know about those words. After instruction and based on their new learning, students can be invited to change or refine their understanding of the vocabulary that had been introduced earlier.

- **Use of graphic organizers (webs, mind maps, etc.)**

Many teachers already use some form of graphic organizer as part of their instruction. These “pictures” of the content being taught and the relationships among its various parts help some students better grasp the ideas. However, it should also be noted that a few students will be visually distracted by graphic organizers and will not find them useful.

- **Use of sponges during spare minutes (for example, during transitions)**

Sponges are simple activities that make good use of instructional time. For example, when there are just a few minutes left before a transition, not enough time to begin new instruction or continue instruction, the teacher might complete a quick review of what was taught by asking students to recall three important points. Alternatively, they might use “down” time to practice math facts or review vocabulary.

- **Use of anticipation guides**

An anticipation guide is another means for assessing student learning. Teachers would prepare several statements about the topic at hand, some of which will challenge student thinking. Students discuss the statements in a large-group format, or in a small group arrangement. After instruction, each statement is recalled and final comments are made.

# Tiering Instruction

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There are many ways to tier instruction. Here are a few that can provide many ideas for differentiating instruction in your co-taught classroom.

- **Tier by challenge**

Use Bloom's taxonomy to provide activities as various levels of challenge. A comprehension level activity might ask students to summarize information from their textbooks. An application level activity might ask students to find information from another source and chart it. An analysis level activity might ask students to create a Venn diagram that summarizes captures key information, or to write an essay that draws conclusions about the materials read.

- **Tier by resources**

In this tiering approach students have the same assignment. However, the materials they are given in order to complete their work vary in terms of complexity. The materials might be based on reading level or by the amount of analytical information included.

- **Tier by outcome**

In some cases students will use the same materials, but the outcomes they produce will be different. For example, some students might create a brochure to capture ideas about a piece of literature read. Other students might create brochure, but one that suggests societal implications of the literature.

- **Tier by product**

Some students might write an essay while other students write bullet points. Some students might create a play while others create a cartoon strip. In this approach to tiering, students are learning the same content, but the products they produce vary based on interests, strengths, and teach judgment.

## 5. Student Participation

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How students learn content is the partner to how co-teachers structure and present information. To the extent that co-teachers can help their students become active learners in large and small groups and independent learners when assigned individual work, they are providing them with skills that will help them throughout their lives. These categories of approaches can assist students in their learning in co-taught settings:

- **Increased participation during large-group instruction**

In both elementary and secondary classrooms, large-group instruction should be frequently punctuated by opportunities to actively participate. The more often every student participates in a class activity, the fewer behavior problems will occur and the better student learning will be.

- **Use of learning strategies**

As students learn simple or complex strategies for remembering information, organizing their work, taking tests, and so on, their independence increases. Although the focus of this seminar is NOT on this particular technique, all teachers should familiarize themselves with learning strategies and incorporate them into their teaching.

- **Techniques for completing seatwork or long-term assignments**

Many students with learning and behavior problems experience difficulty completing work independently, and when long-term projects are assigned, they forget about them until just before the due date. Helping them on such tasks is fundamental in inclusive classrooms.

- **Alternatives to traditional instruction**

Many teachers are using centers, projects, problem-based learning, inquiry, and contracts as ways to bring concepts of differentiating together. These approaches encourage student learning while maximizing their strengths.

- **Appropriate opportunities for completing homework**

Homework can be a valuable learning tool or a painful ordeal. Teachers with diverse student groups should consider alternatives to thinking about and assigning homework, keeping individual student needs in mind.

# Promoting Active Student Participation

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One fundamental component of effective instruction is active student participation. Some teachers promote active student participation by using cooperative groups and other structured peer-mediated approaches. However, even if you are using a large-group instructional strategy, you can still create many opportunities for student participation using these techniques:

## 1. Think, Pair, and Share

In this approach, students in a large group are first paired with a classmate, either for the specific lesson or for a period of time (for example, for one week). The teacher poses a question to the class and instructs students to think carefully about how they would answer the question. After a short pause, students are then instructed to “pair and share.” That is, they take turns giving an answer to their partners. After a brief time is allowed for this activity (often less than one minute), the teacher solicits answers from the large group.

This strategy not only gives every student in class a chance to participate in responding to each question, it also adds the tremendously important advantage of helping students who are unsure of answers to prepare to participate in the ensuing discussion. By keeping time allotted for answering relatively brief, the teacher also prevents students from getting distracted.

This technique can be used at every age/grade level, in every subject matter, with students with a huge variety of learning abilities. It should be an integral part of all large-group instruction.

*Variation:* To ensure that each student has an opportunity to share first, the teacher can call the number of the person to go first (the “ones” or “twos”) or students can be reminded to take turns answering first.

*Examples:*

"What are three animals that live in the woods?"

"Is Sully Sullenberger a hero? Why/why not?"

"Who was the character responsible for most of the story's action?"



## **2. Numbered heads together**

In this variation of peer mediated approaches, students are assigned to small groups of equal size (usually about four students) and then each member is assigned a number. The teacher asks a question and the small groups have as a goal making sure that each group member can answer the question. After a brief time, the teacher calls the group back together and calls one of the numbers (for example, "Two's up."). All students with that number stand.

The teacher then calls on one of those students to respond to the question. In some versions score is kept and teams that do not miss a question "win." If a class has a student with a significant cognitive disability, it might work best to partner that student with another class member (i.e., the group would have two 4's) so that issues of fairness are avoided.

Like Think, Pair and Share, this strategy helps all students participate and helps students prepare to participate in large-group discussions. Students usually enjoy this strategy because it has elements of both skill and chance. Students often work diligently to help all group members to understand what was asked because of the benefit for the group.

*Variation:* It is important to call the student numbers randomly so students cannot predict which "number" is "up." This could be done by drawing slips of paper from a container or rolling a die.

*Examples:*

"What is a beaker?"

"What is the lesson the poet is trying to teach us?"

"Why did the children run away from the shop?"

"What are products produced in the state of New Hampshire?"

"What are the major causes of the Revolutionary War?"

## **3. Speak or Pass**

In this participation strategy, the teacher asks the class group a question for which there might be several answers. Each student in order by rows provides an answer, but may say "pass" if he or she has nothing to contribute. The teacher decides when to stop the Speak or Pass chain.

## *Promoting active student participation (continued)*

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*Variation:* Sometimes, students will find it amusing to say “pass” repeatedly. However, they usually tire of this after a few say it and begin offering their comments on the question. If the problem persists, it might be appropriate for the teacher and students to discuss the issues and agree on a strategy to resolve it.

*Examples:*

"What is an example of an emotion?"

"Who are the main characters of the novel?"

"What is one of the systems of the human body?"

### **4. Choral responding**

Another simple participation technique is to have students chorally respond to a question. This approach lets every student participate, and yet does not pressure a student who may be unsure of an answer. The teacher asks a simple question and all students answer out loud. If several answers were given, the teacher might call on one student and then ask the question again so all students give a correct response.

A variation of this approach is called "One Say, All Say." In OSAS, the teacher asks a question and call on an individual student. When the student answers correctly, the teacher prompts the entire class to repeat the answer. If the student answers incorrectly, the teacher just calls on another student. Once the correct response is given by all, the teacher might ask the student who missed the question to repeat the answer again.

Yet another variation of this approach can be used during reading. When the material is difficult, the teacher might read one sentence and then have students repeat the sentence. Similarly, fluent readers could read a line that is repeated by the entire class. Sometimes, teachers read with students, eventually dropping out and letting students read alone.

The trick to this classroom approach is to make it fast-paced and interesting for students. If one or two students do not respond, they will hear the answers from others.

## Example: Options for Assignments

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- Debate
- Make a speech
- Write an essay
- Write a magazine article
- Create a riddle
- Create a crossword puzzle
- Write a letter
- Construct a timeline
- Create a chart or graph
- Conduct an interview
- Design an exhibit
- Design a greeting card
- Create an ad
- Design a brochure
- Make a clay sculpture
- Create a slogan
- Act out a scene
- Perform a skit
- Invent a code
- Design a puzzle
- Tell a story
- Write a story
- Write a newspaper article
- Make an audiotape
- Re-write the ending
- Make a diagram
- Design a computer graphic
- Keep a journal
- Write a song
- Make a diorama
- Develop a theory
- Take pictures-digital camera
- Design a movie poster
- Design a checklist
- Write an editorial
- Play "Charades"
- Make a videotape
- Draw a caricature

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From Heacox, D. (2002). Differentiating instruction in the regular classroom: How to reach and teach all learners. Minneapolis: Free Spirit.

## 6. Evaluation of Student Performance

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How should students with special needs be graded in co-taught classes? There are many correct answers to that question depending on student needs and teacher comfort level. Here are a few key ideas to keep in mind:

- Students who receive accommodations to enhance learning generally should be evaluated and graded in a manner similar to that of other students. There is no need to indicate that accommodations have been used on report cards. Some students receiving significant accommodations are likely to continue to receive such assistance as adults in the workplace.
- Students for whom significant curriculum reductions are made should have this indicated on the report card, but local policies should be followed to avoid inappropriately calling attention to the student's disability.
- Every student who is working hard and trying to do what is asked should be rewarded for that effort. However, whether effort should be part of a student's grade is a matter for discussion.
- Occasionally and with careful consideration, a student with an IEP might be given a failing grade. This often occurs when accommodations have been made, but the student chronically refuses to attempt the assigned work.
- In secondary settings, alternatives to traditional grading might be available and sometimes employed. Pass/fail or credit/no credit might be used on the report card. In a few instances, students might receive credit for a "special education course" even though fully participating in a general education class. This strategy sometimes alleviates general education teachers' concerns about clear communication regarding the mastery of course content. It is very unusual to use these types of strategies in elementary schools where grades are largely a matter of communication among teachers, parents, and students.
- If grades are modified, co-teachers have an increased responsibility to ensure that parents understand their meaning. Conferences that include specific examples of student work and explanations of how the work is evaluated can assist in this effort.
- Expectations about grading should be discussed before co-teaching begins so that differences can be addressed.
- What is most important is that grading systems for all students have a rationale that addresses both standards and special needs and that they are implemented throughout a school.
- If grades are modified, co-teachers have an increased responsibility to ensure that parents understand their meaning. Conferences that include specific examples of student work and explanations of how the work is evaluated can assist in this effort.
- Expectations about grading should be discussed before co-teaching begins so that differences can be addressed.
- What is most important is that grading systems for all students have a rationale that addresses both standards and special needs and that they are implemented throughout a school.

## 7. Partnership Considerations

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Part of making instructional accommodations for students involves finding effective and efficient ways to work with special education and other support services staff.

1. Keep in mind that you have a frame of reference that influences your interactions and that others may have a frame of reference very different from yours. If you do not recognize both these facts, your communication may miss the mark. Remember that what you say is not the issue, it's what and how the other person hears the communication.
2. When another person relates a concern, think about why the person is sharing information to avoid concluding that he or she wants advice from you.
3. When another person relates a concern, avoid the temptation to trade your stories related to the topic. This type of "one-upping" often leads the other person to perceive that her message is not valued. It also interferes with accurate listening.
4. Much miscommunication occurs because of poor listening. You can confirm that you have accurately heard others' messages by paraphrasing the information and asking for confirmation that you have correctly received it.
5. As much as possible, focus your interactions on information that is observable. The more you rely on opinions and inferences, the more likely is miscommunication.
6. Nonverbal communication is essential in effective interactions, but should be considered in context. You have a double responsibility related to nonverbal communication: to monitor your own, and to take others' with an understanding of its potential inaccuracies.
7. When you interact with others, beware of the impact of words that have a strong emotional content. If you tell another person that he or she is "angry," that person may become angry even if that was not the case. When speaking to parents, use of words such as "oppositional," "bad attitude," and "uncooperative" may also serve as "hot words."
8. If you have an opinion, you should take ownership for it. Likewise if you have a concern related to an issue with a colleague or parent, you should acknowledge that the matter is yours.
9. Although you do not need effective communication skills for all your interactions, if you do not practice such skills when they are not essential, they will not be present when they ARE essential. The more tense or awkward the interaction, the more needed are communication skills and the more difficult they are to implement.
10. As you identify your own typical communication patterns, it is often helpful to generate scripts for responding to others. Scripts are patterns of communication that can guide your communication when a high level of skills is critical.

## Instruction: Next Steps

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OK, so you understand what differentiation/specialized instruction involves in co-teaching, and you believe that it is important for student success. But moving forward feels totally overwhelming. How should you make your next steps realistic? Here are a few ideas:

- Frequently reflect on the match between your shared classroom and the philosophy of teaching and learning you want to practice. Look for matches and mismatches, and use both to guide you.
- Create a mental image of what you want your shared classroom to look like, and use it to help plan and assess changes.
- Prepare students and parents for a differentiated classroom so that they are your partners in making it a good fit for everyone. Be sure to talk often with students about the classroom--why it is the way it is, how it is working, and what everyone can do to help.
- Begin to change at a pace that pushes you a little bit beyond your common comfort zone--neither totally duplicating past practice nor trying to change everything overnight. You might begin with just one lesson or unit, just one time period, or just one curricular element (content, process, product, or learning environment).
- Think carefully about management routines--for example, giving directions, making sure students know how to move about the room, and making sure students know where to put work when they finish it.
- Teach the routines to students carefully, monitor the effectiveness of the routines, discuss results with students, and fine tune together.
- Take time off from change to regain your energy and to assess how things are going.
- Build a support system of other educators. Let administrators know how they can support you. Ask specialists (e.g., in gifted education, second language instruction) to co-teach with you from time to time so you have another pair of hands and eyes. Form study groups on differentiation and SDI with like-minded peers. Plan and share materials that address diverse student needs with colleagues.
- Enjoy your own growth. One of the great joys of co-teaching is recognizing that the teacher always has more to learn than the students and that learning is no less empowering for adults than for students. This seems particularly true for co-teachers.

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Based on Tomlinson, C. A. (2004). *Differentiation of instruction in the elementary grades*. ERIC Digest retrieved from <http://www.ericdigests.org/2001-2/elementary.html>.

## ❖ Apps for Co-Teachers

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As co-teachers increasingly use various tablet devices and even their smartphones in their partnered classrooms, they are finding a wealth of apps to support their instruction. These are examples of the apps they are using. Note that you will need to explore which platforms and devices are supported (e.g., Apple, Android; iPhone, Samsung Galaxy Tab 3) because such information changes rapidly and new options emerge almost daily. Also, cost information should be verified as this, too, changes frequently.

- Class Dojo

This is a highly popular behavior management app. You create a class group, determine behavior to focus on, and record student behavior. An audible signal can be turned on so that student know if a behavior has been noted as positive or negative. You can share data with parents and generate reports.

- Teacher's Assistant Pro

This is another behavior management app. It allows you to track and record student behaviors—both positive and negative. This information can be sent to parents, and you can create reports related to behavior. This app has many dimensions for customizing it for your co-teaching situation.

- Noteshelf

There are many note-taking apps available. This one works well when you need to keep data on particular students over a period of time. The app permits you to create as many notebooks as you need (for example, one for each student in the class who has a special need). Within each notebook, you can keep student data or other information. You can type or use a stylus to write in the notebooks, notes can be highlighted, and the information is exportable.

- Interval Timer

Co-teachers sometimes need to gather data related to student academic or social behavior using interval recording (for example, for how long does a student work before stopping, how long does it take a student to being work). This app lets teachers determine how often they want to check on the student and alerts them to check on that student. Although designed for health and physical activities, used with an earbud and smartphone in a co-taught class, it makes this type of data collection easily managed.

- Tally Counter

This simple app enables you to count student behaviors. You can add or subtract tallies, use the counter with either hand, and set specific limits for the tallies. Best of all, this app is free.

## ❖ *Apps for Co-Teachers (continued)*

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- Super Duper Data Tracker

This inexpensive app lets you enter students' names, create goals customized to their needs, group students as needed, record their behaviors, switch easily between students while gathering data, and create reports related to student performance. This app allows you to record student performance with prompts as well. You can add notes related to the goals as you record, you can graph student data, and you can send reports to parents and others.

- Class Manager

This app is designed to enable you to monitor student behavior as well as keep a record of interventions you use with students. You can identify the classroom activity during which a behavior occurs, and the app uses automatic date and time stamping. Users can add customized behaviors or interventions, so that all types of student needs can be addressed. Data can be aggregated and exported. There is also an integrated grade book within the app.

- Super Note

This is an app that is designed for simultaneously recording and taking notes. You can also switch between this and other apps without stopping the recording. This app would be useful to record students reading, for example, so that fluency could be assessed. Because it is very easy to use and has very good audio quality, the app could also be used when students need to dictate responses.

- Record of Reading

This app is designed specifically to gather running records on student reading performance. It is cross-referenced to a variety of standard, has a built-in recorder, allows the user to tally and make notes using a stylus, and creates reports. This app even has a feature to ensure that you do not inadvertently change the screen on your iPad when you rest your hand on it while gathering data!

- Stick Pick

This app is designed to help educators treat students fairly. You create your class group, enter information about their learning levels, and then click to call on students during instruction. The app also suggests question starters based on student learning level (for example, students who are more advanced versus those learning English).



## ❖ Websites for Co-Teachers

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This list of websites is not intended to be comprehensive. Rather it includes sites that may have been mentioned during the professional development, those that have solid ideas related to co-teaching, and several that have a wealth of information on evidence-based instruction for students with special needs.

- ✓ <http://iris.peabody.vanderbilt.edu/>

The IRIS Center, a federally funded project that you may access without charge and without registering, is designed to provide basic information to preservice and practicing educators about students with disabilities and other special needs. For example, if you and your co-teacher have a student with autism, you can complete a module on IRIS to learn about the characteristics, needs, and instructional strategies for working with that student. Modules address many topics, from various disability categories, to effective instruction, to behavior management.

- ✓ <http://foldables.wikispaces.com/>
- ✓ [http://www.homeschoolshare.com/lapbooking\\_resources.php](http://www.homeschoolshare.com/lapbooking_resources.php)
- ✓ <http://www.fultonschools.org/k12/math/documents/FoldablesBook.pdf>

One instructional strategy many co-teachers use is foldables. Foldables are simple or complex paper structures made by folding and/or cutting one or more sheets of paper. They are used for a wide variety of instructional topics, but their main purposes are to facilitate student engagement with content being learned and to provide support for student learning. Examples of the uses of foldables include teaching vocabulary, helping student remember key concepts they are learning, explaining complex processes or procedures in a concrete way, and helping student memorize formulae and other material. These websites provide hundreds of examples of foldables.

- ✓ <http://visualstrategies.com>

One element to monitor in co-taught classes is the amount of teacher talk v. the amount of student talk. In addition, teachers often should pair verbal instruction or directions with visuals that help some students better focus and learn. At this website, you can learn about strategies for creating and using visual strategies in your shared classroom.

- ✓ <https://www.newsela.com/>

This website (you have to sign up but it's free) offers a valuable service to teachers. It offers new articles on a daily basis across subject areas that can be downloaded and printed. Best of all, any single article can be accessed at four different reading levels, so that a wide range of student reading levels can be accommodated.

- ✓ <http://matti.usu.edu/nlvm/nav/vlibrary.html>

The National Library for Virtual Manipulatives contains links to extensive collections of virtual manipulatives PreK-12. Topics include numbers and operations, geometry,

## ❖ *Websites for co-teachers (continued)*

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algebra, measurement, and data analysis and probability. Using this website enables you to provide hands-on instruction and increase student engagement.

- ✓ <http://www.ncela.gwu.edu/>

The National Center for English Language Acquisition is a federally funded website that includes many resources for working with in an inclusive way with students who are ELLs. The site also includes summaries of recent research on effective strategies for working with such students.

- ✓ [http://www.frsd.k12.nj.us/rfmslibrarylab/di/differentiated\\_instruction.htm](http://www.frsd.k12.nj.us/rfmslibrarylab/di/differentiated_instruction.htm)

This webpage from the Flemington-Raritan Regional School District (Flemington, NJ) contains a great list of websites that offer detailed information on accommodating students with special needs in the planning, delivery, and assessment of instruction.

- ✓ *InterventionCentral.org*  
(<http://www.interventioncentral.org/htmdocs/interventions/cbmwarehouse.shtml>)

This well-known website includes many instructional materials for graphing scores, adjusting readabilities, implementing reading fluency/math computation probes, collecting CBM/CBA data, and so on. In the section where you can adjust readabilities for individual readers, the computer automatically counts words per a page and per a row so that it saves teachers' time to prepare for lessons or tests.

- ✓ <http://www.region15.org/curriculum/graphicorg.html>

The Pomperaug Regional School District 15 (CT) has on this webpage an extensive collection of graphic organizers available in English and Spanish (pdf and Word formats provided).

- ✓ <http://www.behavioradvisor.com/>

*Behavior Advisor* is an award-winning website that includes thousands of ideas and links for addressing student behavior problems, whether they are simple or complex. This is a site that is best visited when there is time to browse. Its format is a bit irreverent, but if you have a student whose behavior concerns you, this is the place to look for ideas.

- ✓ <http://forcuriousteachers.blogspot.com/2010/05/using-learning-centers-in-high-school.html>

Secondary teachers sometimes question the use of stations in their classrooms. This website includes examples of high school classrooms in which learning centers have been established. The information easily translates to ways to think about co-teaching.

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## References, Readings and Materials

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- Abell, M. M., Bauder, D. K., & Simmons T. J. (2005). Access to the general curriculum: A curriculum and instruction perspective for educators. *Intervention in School and Clinic, 41*, 82-86.
- Baker, S., Gersten, R., Dimino, J. A., & Griffiths, R. (2004). The sustained use of research-based instructional practice: A case study of peer-assisted learning strategies in mathematics. *Remedial and Special Education, 25*, 5-24.
- Brownell, M. T., Smith, S. J., Crockett, J. B., & Griffin, C. C. (2012). *Inclusive instruction: Evidence-based practices for teaching students with disabilities*. New York, NY: Guilford.
- Bursuck, B., & Blanks, B. (2010). Evidence-based early reading practices within a response to intervention system. *Psychology in the Schools, 47*, 421-431.
- Childre, A., Sands, J. R., & Pope, S. T. (2009). Backward design: Targeting depth of understanding for all learners. *Teaching Exceptional Children, 41*(5), 6-15.
- Coleman, M. (2009). "PowerPoint" is not just for business presentations and college lectures: Using "PowerPoint" to enhance instruction for students with disabilities. *TEACHING Exceptional Children Plus, 6*(1),
- Friend, M. (2008). *Co-Teach! A handbook for creating and sustaining effective classroom partnerships in inclusive schools*. Greensboro: Marilyn Friend, Inc.
- Friend, M. (Co-Producer with L. Burrello & J. Burrello). (2004). *The power of two: Including students through co-teaching* (2<sup>nd</sup> edition) [videotape]. Bloomington, IN: Elephant Rock Productions.
- Friend, M., & Bursuck, W. (2015). *Including students with special needs: A practical guide for classroom teachers* (7<sup>th</sup> edition). Upper Saddle River, NJ: Merrill/Pearson.
- Friend, M., & Cook, L. (2013). *Interactions: Collaboration skills for school professionals* (7<sup>th</sup> edition). Upper Saddle River, NJ: Merrill/Pearson.
- Friend, M., Burrello, L., & Burrello, J. (2009). *More power: Instruction in co-taught classes*. Bloomington, IN: Forum on Education, Indiana University.
- Izzo, M., Yurick, A., & McArrell, B. (2009). Supported e-text: Effects of text-to-speech on access and achievement for high school students with disabilities. *Journal of Special Education Technology, 24*(3), 9-20.
- Marzano, R. (2009). Setting the record straight on "high-yield" strategies. *Phi Delta Kappan, 91*, 30-37.
- vanGarderen, D., & Whittaker, C. (2006). Planning differentiated, multicultural instruction for secondary inclusive classrooms. *Teaching Exceptional Children, 38*(3), 12-20.
- Zirkel, P. A. (1996). Courtside: Another withering decision. *Phi Delta Kappan, 78*, 171-172.
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## Appendix: Planning to Provide Effective Instruction

Lesson Topic \_\_\_\_\_

Date \_\_\_\_\_

Objectives \_\_\_\_\_

	One Teach/One Observe	Station Teaching	Parallel Teaching	Alternative Teaching	Teaming	Teaming
Assessment/ planning						
Materials/ technology/ content						
Environment						
Content						
Student participation/ learning						
Student evaluation						
Adult interactions						