

Building Blocks to Successful Co-Teaching May 2019



## West Virginia Board of Education 2018-2019

**David G. Perry**, President **Miller L. Hall**, Vice President **Thomas W. Campbell, CPA**, Financial Officer

Robert W. Dunlevy, Member F. Scott Rotruck, Member Daniel D. Snavely, M.D., Member Debra K. Sullivan, Member Nancy J. White, Member James S. Wilson, D.D.S., Member

Sarah Armstrong Tucker, Ed.D., Ex Officio Chancellor West Virginia Council for Community and Technical College Education Interim Chancellor West Virginia Higher Education Policy Commission

> **Steven L. Paine, Ed.D.,** Ex Officio State Superintendent of Schools West Virginia Department of Education

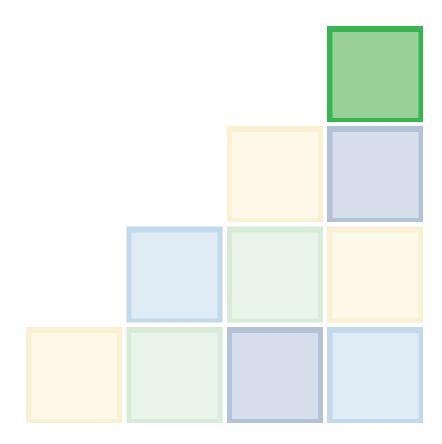
## **INTRODUCTION**

This Co-Teaching Guidance Manual (CTGM) is designed to assist Regular Education Teachers, Special Education Teachers and Administrators in planning and implementing Co-teaching. The CTGM incorporates 'Best Practices' from a variety of nationally recognized experts, such as Anne Beninghof, as well as other specifically designed resources. The CTGM was designed to provide suggestions to administrators in the planning, scheduling, implementation and assessment of Co-teaching. Teachers, both Regular Education and Special Education, are provided Co-teaching suggestions that range from planning and implementing instruction to delineate Co-teacher responsibilities, identifying and adjusting to student learning styles, and implementing Support for Personalized Learning (SPL) techniques.

## **TABLE OF CONTENTS**

| SECTION I ADMINISTRATIVE                             | 1  |
|--|----|
| SECTION II BUILDING BLOCKS TO SUCCESSFUL CO-TEACHING | 7  |
| SECTION III WEEKLY CO-TEACHING DOCUMENTATION         | 11 |
| SECTION IV BUILDING STUDENT LEARNING PROFILES        | 15 |
| SECTION V STUDENT/TEACHER ASSESSMENT TOOLS           | 22 |
| SECTION VI STRATEGIES TO INDIVIDUALIZE LEARNING      | 28 |
| SECTION VII PHYSICAL CLASSROOM LAYOUT                | 31 |
| SECTION VIII PARENT ENGAGEMENT                       | 33 |
| SECTION IX RESOURCES                                 | 36 |

This document was adapted from the RESA 6 Co-Teaching Guidance Manual prepared by the Regional Education Service Agency Co-Teaching Committee consisting of Michelle Hogan, Joseph Paolo, Rick Redd and Cheryl Tuba at RESA 6.



## **SECTION I: ADMINISTRATION**

## To maximize prescriptive instructional capabilities of both teachers during one instructional class:

- · Administrative Co-Teaching Introduction
- · Administrative Observation/Feedback Form
- Co-Teaching Observation Form
- · Administrative Conversation Summary Form
- · Reflective Comments for Future Planning Form

## ADMINISTRATIVE CO-TEACHING INTRODUCTION

## **Purpose:**

To maximize prescriptive instructional capabilities of both teachers during one instructional class.

#### **Scheduling:**

High school emphasis on Language Arts and Math in ninth grade.

Match teacher personalities for teams.

Maximize schedule to provide appropriate Co-teaching match-ups and opportunities.

Keep in mind that Co-teaching can be two general education teachers.

Considerations for restricted common planning: i.e. stipends, comp time, etc.

#### **Observation:**

E-walk options.

Frequent scheduled monitoring by principal of Co-teaching teams.

Scheduling of feedback meetings by principal.

#### **Resources:**

Refer to Section IX

- Instructional Resources
- Planning

## ADMINISTRATIVE TOOLS

#### **Administrative Observation/Feedback:**

Upon reviewing Co-teaching Strategies and Expectations in Section III, Weekly Co-teaching Documentation, the administration will be ready to observe the Co-teaching classroom and provide feedback.

#### **Administrative Conversation Summary:**

Following the observation, the administration will schedule a meeting with the Co-teachers to provide and document feedback using this tool.

#### **Reflective Comments for Future Planning:**

At the end of the Administrative Conversation Summary, the administration and Co-teachers will collaboratively complete this tool.

<sup>\*</sup>Not to be used as an evaluation tool

## ADMINISTRATIVE OBSERVATION/FEEDBACK

| Core Teacher |                 |        |                    | SPED/Core Teac                | SPED/Core Teacher             |  |  |  |  |
|--------------|-----------------|--------|--------------------|-------------------------------|-------------------------------|--|--|--|--|
| Gra          | ade Level       |        | Subject            | Week of                       | Observation Date              |  |  |  |  |
| Ra           | ting Scale 1    | = Lowe | est, 4 = Highe     | est                           |                               |  |  |  |  |
| 1.           | Rate student    | engag  | gement.            |                               |                               |  |  |  |  |
|              | 1 2<br>Comments |        |                    |                               |                               |  |  |  |  |
| 2.           | 1 2             | 3      | 4                  | of the room support the Co    | o-teaching activity selected? |  |  |  |  |
| 2            |                 |        | - <b>A</b> i Al    |                               | 2                             |  |  |  |  |
| 3.           | 1 2             |        | actively enga<br>4 | ged in the co-teaching proc   | .ess:                         |  |  |  |  |
|              |                 |        |                    | sing?                         |                               |  |  |  |  |
|              |                 |        |                    |                               |                               |  |  |  |  |
| 4.           | Are IEP accor   |        | ations and m       | nodifications for special edu | ucation students considered?  |  |  |  |  |
|              | Comments        |        |                    |                               |                               |  |  |  |  |
|              |                 |        |                    |                               |                               |  |  |  |  |
|              |                 |        |                    |                               |                               |  |  |  |  |

## CO-TEACHING OBSERVATION CHECKLIST

| General Educator: | Special Service Provider: |  |  |
|-------------------|---------------------------|--|--|
| Observer:         | Date/Time:                |  |  |

| Behavior Checklist  | Analysis/Comments                                   |
|---|---|
| LOOK FORS   |   |
| Two or more professionals working together in the same physical space   | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Class environment demonstrates parity &<br>collaboration (e.g., both names on<br>board/door, sharing of materials & space)                          | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Both teachers begin and end class<br>together & remain in room entire time  | □ Saw it done well □ Saw an attempt □ Didn't see it |
| During instruction, both teachers assist<br>students with and without disabilities  | □ Saw it done well □ Saw an attempt □ Didn't see it |
| The class moves smoothly with evidence<br>of co-planning and communication<br>between co-teachers   | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Differentiated strategies, to include<br>technology, are used to meet the range of<br>learning needs  | □ Saw it done well □ Saw an attempt □ Didn't see it |
| A variety of instructional approaches<br>(e.g., the 5 co-teaching approaches) are<br>used, including regrouping students                            | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Both teachers engage in appropriate<br>behavioral management strategies as<br>needed and are consistent in their<br>approach to behavior management | □ Saw it done well □ Saw an attempt □ Didn't see it |
| It is difficult to tell the special educator<br>from the general educator   | □ Saw it done well □ Saw an attempt □ Didn't see it |
| It is difficult to tell the special education<br>students from the general education<br>students  | □ Saw it done well □ Saw an attempt □ Didn't see it |
| LISTEN FORS   |   |
| Co-teachers use of language (e.g., "we",<br>"our") demonstrates true collaboration<br>and shared responsibility                                     | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Co-teachers phrase questions and<br>statements so that it is obvious that all<br>students in the class are included                                 | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Students' conversations evidence a sense<br>of community (e.g., including peers with<br>and without disabilities)                                   | □ Saw it done well □ Saw an attempt □ Didn't see it |
| Co-teachers ask questions at a variety of<br>levels to meet all students' needs (basic<br>recall to higher order thinking)                          | □ Saw it done well □ Saw an attempt □ Didn't see it |

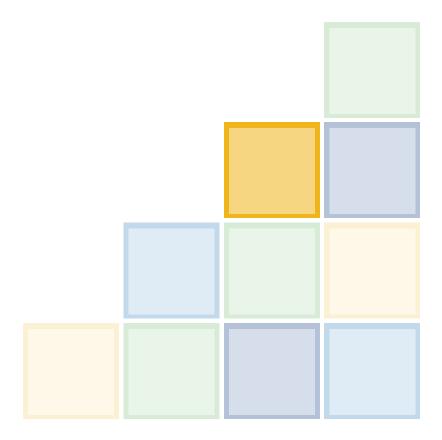
© Murawski, W. W. (2007). Co-teaching Solutions System. www.coteachsolutions.com

## ADMINISTRATIVE CONVERSATION SUMMARY

| Core 7              | Гeacher _    |                      | SPED/Core Teache        | er               |
|---------------------|--------------|----------------------|-------------------------|------------------|
| Grade Level Subject |              | Subject              | Week of                 | Observation Date |
| Conve               | ersation Dat | re                   |                         |                  |
| 1.                  | Student      | Engagement           |                         |                  |
|                     |              |                      |                         |                  |
| 2.                  | Physical     | Environment          |                         |                  |
|                     |              |                      |                         |                  |
| 3.                  | Co-Teac      | hing Models          |                         |                  |
|                     |              |                      |                         |                  |
| 4.                  | lep Acco     | mmodations and Mod   | difications             |                  |
|                     |              |                      |                         |                  |
| 5.                  | Other Co     | oncerns/Consideratio | ns Impacting the Lesson |                  |
|                     |              |                      |                         |                  |
|                     |              |                      |                         |                  |
| Not to              | ho used a    | s an avaluation tool |                         |                  |

## REFLECTIVE COMMENTS FOR FUTURE PLANNING

| Core Te | eacher             | SPED/Core Teacher |  |  |  |  |
|---------|--------------------|-------------------|--|--|--|--|
| Grade   | Level Subject      |                   |  |  |  |  |
| 1.      | Lesson Content:    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
| 2.      | Teaching Strategy: |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
| 3.      | Expectations:      |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |
|         |                    |                   |  |  |  |  |



# SECTION II: BUILDING BLOCKS TO SUCCESSFUL CO-TEACHING

## To ensure a successful Co-teaching continuum, these foundation blocks should be established and built upon:

- Key Co-Teaching Components
- Successful Co-Teaching Strategies
- · What Co-Teaching Is, What It Is Not
- · Optional Co-Teaching Enhancement Ideas
- · Recognized Co-Teaching Models

## KEY CO-TEACHING COMPONENTS

- 1. Classroom management practices, related to behavior, will be shared and will comply with students' IEP/504/BIP/SAT.
- 2. Check for understanding with individual students.
- 3. Check for engagement by walking around, supporting students and gathering/recording engagement data.
- 4. Both teachers must reinforce positive student behavior, i.e. engagement activities, individual/small group, etc.
- 5. Procedures for contacting parents will be shared by Co-teachers.
- 6. Delineate the handling of classroom logistics/procedures, i.e. passes, routines, etc.
- 7. Share the creation of formative assessments and utilize summative assessments for student progress.
- 8. Both teachers must have copies of Co-teaching daily/weekly lesson plans.
- 9. General education teacher is responsible for lesson plan adherence to content standards and objectives.
- 10. Special education teacher will ensure lesson plan compliance with students' IEP/504/BIP/SAT.
- 11. Delineation of recap/check for understanding activities at the conclusion of each lesson.
- 12. Share identification of those students needing reteach and implementation modality options.
- 13. Consider classroom physical arrangement (Section VII).
- 14. After reviewing students' learning styles and performance, adjust current and future instructional strategies.

#### SUCCESSFUL CO-TEACHING STRATEGIES

- 1. Pre-planning and preparation of stations/activities.
- 2. Incorporate relationship-building interactions as part of group or team activities that result in easing collaborative tension and promoting a comfortable environment to express individual ideas or opinions (i.e., development guidance CSOs).
- 3. Verbally reinforce key concepts.
- 4. Visually designate key points on the board or using technology at hand.
- 5. Utilize modeling where needed.
- 6. Ask clarifying questions on behalf of the students who may be intimidated or confused.
- 7. Provide kinesthetic tools, manipulatives, aids, props, etc. to encourage the use of multiple instructional modalities (see examples in Section IX).
- 8. Pre-determine shared approach to homework.
- 9. Share the responsibility for student evaluation procedures and the assignment of grades, including programs/requirements such as Roster Verification, the West Virginia Early Warning System (BrightBytes), etc.
- 10. Determine who will state the purpose at the beginning of each lesson.
- 11. Determine who will introduce/review relevant vocabulary for each lesson.
- 12. Pre-determine instructional modalities used for individuals/groups for each lesson.
- 13. Pre-determine individual responsibilities within each lesson.

## WHAT CO-TEACHING IS, WHAT IT IS NOT

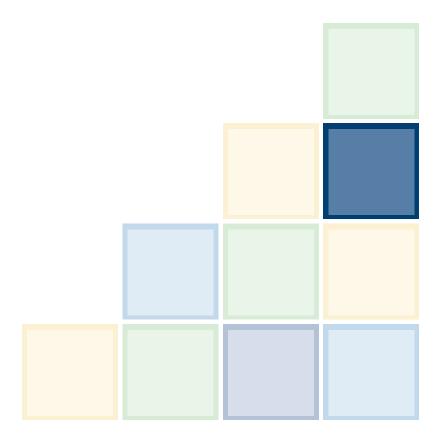
| Element of co-<br>teaching      | Co-teaching DOES  | Co-teaching does NOT   |
|---------------------------------|---|--|
| "two or more<br>professionals"  | involve at least 2 credentialed professionals—indicating that co-teachers are peers having equivalent credentials and thus can truly be partners in the instructional effort. The general education curriculum provides the instructional framework, with the flexibility of it being modifiable for students who require it (Fennick, 2001). | involve a teacher and a classroom volunteer or paraprofessional, many of whom have not had the professional preparation to co-teach nor is co-teaching an appropriate role expectation for them. This is not to say that paraprofessionals do not have important classroom roles—they just should not be asked to fulfill responsibilities of certificated staff (Friend, 2003). |
| "joint delivery of instruction" | mean both professionals coordinating and delivering substantive instruction, ensuring that both teachers have active roles. Co-teachers should work to ensure that their instructional strategies engage all students in ways that are not possible when only one teacher is present (Austin, 2001, Gately & Gately, 2001).                   | mean two adults merely being present in a classroom at the same time. It also does not mean that the general education teacher plans and delivers all of the lessons while the special education teacher circulates. Coteaching does not involve taking turns lecturing to the whole group (Murawski, 2002).   |
| "diverse group of students"     | allow teachers to respond effectively to diverse needs of students, lower the teacher- student ratio, and expand the professional expertise that can be applied to student needs (Hourcade & Bauwens, 2001).  | Include separating or grouping students with special needs in one part of the classroom or along the fringes, even if these practices are well-intentioned (Friend, 2003).   |
| "shared classroom<br>space"     | Feature co-teachers instructing in the same physical space. Although small groups of students may occasionally taken to a separate location for a specific purpose and limited time, co-teaching should generally take place in a single environment—separating it from the practice of regrouping for pullout programs (Friend, 2003).       | Include teaching teams that plan together but then group and instruct students in separate classrooms (Trump, 1966, Geen, 1985).   |

## OPTIONAL CO-TEACHING ENHANCEMENT IDEAS

- 1. Illustrate or create a mind map.
- 2. Flip-flop reading aloud (teachers take turns reading material).
- 3. Go to appropriate websites to support instruction and to provide visual images (see examples in Section IX).
- 4. Create a Wordle (www.wordle.com) of the conversation/vocabulary.
- 5. Write color coded notes on the board/white board.

## ANN BENINGHOF CO-TEACHING MODELS

| Co-Teaching<br>Model         | Description   | Pros  | Cons   |
|------------------------------|---|---|--|
| Lead and<br>Support          | General education teacher does up front planning. Special education teacher is fully involved in daily planning, implementation, and assessment.                                    | Both teachers involved in most phases of instruction  | Less input in planning for differentiation                   |
| Duet Model                   | Both teachers share the entire instructional process  | Most integrated for students, fully utilizes all expertise  | Most time intensive  |
| Speak and Add/<br>Chart      | One teacher leads, the other teacher adds visually or verbally  | No co-planning time,<br>almost anyone can do this   | Can step on toes, doesn't fully utilize expertise            |
| Learning Style               | Teachers plan lesson and divide responsibilities by learning styles   | Addresses learning style of the 'typical' struggling student, clear responsibilities  | Assumes that teacher will tolerate activity in the lesson    |
| Adapting Model               | One teacher leads, while the second teacher wanders the room, providing on-the-spot adaptations   | Very little co-planning time, focused expertise   | Less fundamental impact<br>on student learning               |
| Complementary<br>Instruction | General education teacher focuses on curriculum. Special education teacher focuses on study skills, survival skills and special education strategies through mini-lessons or input. | Good for related professionals, focused expertise, sets up expectation that special education will be provided in general education setting | May slow down pacing   |
| Skills Group                 | Teachers divide students into more homogeneous subgroups and provide leveled instruction  | Clear responsibilities, focused expertise   | Possible feel of<br>"tracking"                               |
| Station Teaching             | A small group of students is pulled to the side for direct instruction  | Focused expertise   | Impacts only a few kids with the expertise of the specialist |
| Parallel Teaching            | Class is broken into 2 heterogeneous groups; each teacher takes a group   | Good student-teacher ratio  | Requires equal expertise, lots of planning time              |



# SECTION III: WEEKLY CO-TEACHING DOCUMENTATION

This tool captures the delineation of Co-teaching responsibilities, expectations, models, and strategies to be used to optimize student performance:

- · Co-Teaching Strategies and Expectations
- · Co-Teaching Lesson Plan Template
- · Co-Teaching in the Classroom

## CO-TEACHING STRATEGIES AND EXPECTATIONS

| Core Teacher         |             |       |         | SPED/Core Teacher |             |          |        |        |        |      |  |
|----------------------|-------------|-------|---------|-------------------|-------------|----------|--------|--------|--------|------|--|
| Grade Level Subject  |             |       |         | Week of           |             |          |        |        |        |      |  |
| Lesson Content _     |             |       |         |                   |             |          |        |        |        |      |  |
| Expectations:        |             |       |         |                   | Mon.        | Tues     | 5.     | Wed.   | Thurs. | Fri. |  |
| Materials            |             |       | Ger     | n Ed              |             |          |        |        |        |      |  |
|                      |             |       | Spe     | ec Ed             |             |          |        |        |        |      |  |
| Evaluation Tool: Cho | ose an iter | m     | Ger     | n Ed              |             |          |        |        |        |      |  |
|                      |             |       | Spe     | ec Ed             |             |          |        |        |        |      |  |
| Intro Statement      |             |       | Ger     | n Ed              |             |          |        |        |        |      |  |
|                      |             |       | Spec Ed |                   |             |          |        |        |        |      |  |
| Vocab Review         |             |       | Gen Ed  |                   |             |          |        |        |        |      |  |
|                      |             |       | Spec Ed |                   |             |          |        |        |        |      |  |
| Wrap-up Activity     |             |       | Gen Ed  |                   |             |          |        |        |        |      |  |
|                      |             |       | Spec Ed |                   |             |          |        |        |        |      |  |
| Teaching Strategies  | (based o    | n Ann | е Ве    | eninghof'         | 's Co-Teach | ning Mod | dels): |        |        |      |  |
| Models               | Mon.        | Tue   | es.     | Wed.              | Thurs.      | Fri.     | Cor    | nments |        |      |  |
| Duet                 |             |       |         |                   |             |          |        |        |        |      |  |
| Lead and Support     |             |       |         |                   |             |          |        |        |        |      |  |
| Speak/Add            |             |       |         |                   |             |          |        |        |        |      |  |
| Learning Style       |             |       |         |                   |             |          |        |        |        |      |  |
| Adapting             |             |       |         |                   |             |          |        |        |        |      |  |
| Complementary        |             |       |         |                   |             |          |        |        |        |      |  |
| Parallel             |             |       |         |                   |             |          |        |        |        |      |  |
| Station              |             |       |         |                   |             |          |        |        |        |      |  |

Note: Duet and Lead and Support must be checked daily; other styles are complementary

Skills Group

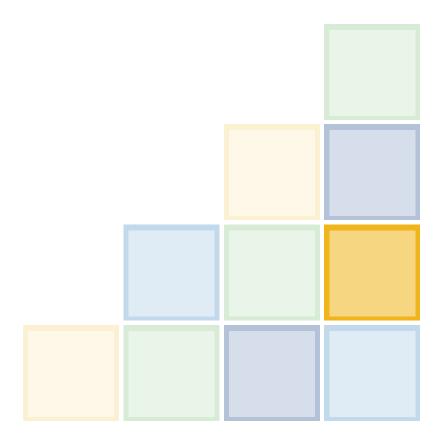
## CO-TEACHING LESSON PLAN TEMPLATE

| Date Prepared |                  |      | Teacher           | Support Need   | led (Students)                  | Co-Teaching Model |                      |
|---------------|------------------|------|-------------------|----------------|---------------------------------|-------------------|----------------------|
| Week of       | Veek of          |      | A)                |                |                                 | Lead & Suppo      | rt                   |
| Subject       | Subject          |      |                   |                |                                 | Duet              |                      |
| Class         |                  |      |                   |                |                                 | Speak & Add/      | Chart                |
| Period        |                  |      |                   |                |                                 | Adapting          |                      |
| Comment       |                  |      | В)                |                |                                 | Learning Style    |                      |
|               |                  |      |                   |                |                                 | Complementa       | ry                   |
|               |                  |      |                   |                |                                 | Skills Group      |                      |
|               |                  |      |                   |                |                                 | Stations          |                      |
|               |                  |      |                   |                |                                 | Parallel          |                      |
|               | Std<br>Number(s) | Goal | Methods/ Instruct | ional Strategy | Materials/<br>Support<br>Needed | Assessments       | Co-Teaching<br>Model |
| Monday        |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
| Tuesday       |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
| Wednesday     |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
| Thursday      |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
| Friday        |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |
|               |                  |      |                   |                |                                 |                   |                      |

## CO-TEACHING IN THE CLASSROOM

| If one of you is doing this:  | The other can be doing this:   |
|---|--|
| Lecturing   | Modeling notetaking on the board or overhead, ensuring "brain breaks" so that students can process lecture information |
| Taking attendance   | Collecting and reviewing last night's homework; introducing a social or study skill                                    |
| Passing out papers  | Reviewing directions; modeling the first problem on the assignment   |
| Giving instructions orally  | Writing down instructions on the board; repeating or clarifying any difficult content                                  |
| Checking for understanding with large heterogeneous group of students         | Checking for understanding with small heterogeneous group of students  |
| Circulating, providing one-on-one support as needed                           | Providing direct instruction to whole class  |
| Prepping half the class for one side of a debate                              | Prepping the other side of the class for the opposing side of the debate   |
| Facilitating a silent activity  | Circulating, checking for comprehension  |
| Providing a large group instruction   | Circulation, using proximity control for behavior management   |
| Running last minute copies or errands in the building                         | Reviewing homework, previewing a study skill or test-taking strategy   |
| Re-teaching or pre-teaching with a small group                                | Monitoring the large group as they work independently  |
| Facilitating sustained silent reading   | Reading aloud quietly with a small group; previewing upcoming information  |
| Reading a test aloud to a group of students                                   | Proctoring a test silently with a group of students  |
| Creating basic lesson plans for standards, objectives, and content curriculum | Providing suggestions for modifications, accommodations, and activities for diverse learners                           |
| Facilitating stations or groups   | Also facilitating stations or groups   |
| Explaining a new concept  | Conducting role play or modeling the concept, asking clarifying questions  |
| Considering modification needs  | Considering enrichment opportunities   |
|   |  |

Source: Tips and Strategies for Co-Teaching at the Secondary Level by Wendy Murawski and Lisa Dieker, Teaching Exception Children, May/June 2004, p. 57. Copyright 2004 by The Council for Exceptional children. Reprinted with permission.



# SECTION IV: BUILDING STUDENT LEARNING PROFILES

## Build student learning profiles to establish baseline information to enhance future student engagement and performance:

- Building Student Profiles
- · Multiple Intelligences: Strategies in the Classroom
- Student Engagement Profile
- Student Learning Preferences
- · Student Engagement Profile Directions

## BUILDING STUDENT LEARNING PROFILES

**Multiple Intelligences Online Assessments:** It is recommended that students be given a Multiple Intelligence Assessment to determine best teaching strategies to accommodate student learning styles. This will provide insight into the types of engagement activities in which they will be most interested and successful.



## **Learning Styles:**

Verbal-Linguistic - Learn best through reading, writing, listening, and speaking

**Logical-Mathematical** - Learn best by classifying, categorizing, and thinking abstractly about patterns, relationships, and numbers

**Visual-Spatial** - Learn best by drawing or visualizing things using the mind's eye.

**Auditory-Musical** - Learn using rhythm or melody, especially by singing or listening to music

**Bodily-Kinesthetic** - Learn best through touch and movement

**Interpersonal** - Learn through relating to others by sharing, comparing, and cooperating

**Intrapersonal** - Learn best by working alone and setting individual goals

**Naturalistic** - Learn by working with nature

## **Multiple Intelligences Online Assessments:**

**Edutopia:** http://www.edutopia.org/multiple-intelligences-assessment

**Birmingham Grid for Learning:** http://www.bgfl.org/bgfl/custom/resources\_ftp/client\_ftp/ks3/ict/multiple\_int/questions/choose\_lang.cfm

**Student Learning Preferences Quick-Glance (page 13):** This document is meant to be used as a quick view of how students learn best. Additionally, there is a tabulation component that will provide data for individual, class, homeroom and school.

**Student Engagement Profile (page 15):** This tool will be used to give insight into the quality of transitions, effectiveness of instructional strategies, seating configurations, effectiveness of existing routines and procedures, types of classroom distractions, etc.

## MULTIPLE INTELLIGENCES STRATEGIES IN THE CLASSROOM

| Verbal - Linguistic        | Logical - Mathematical             | Visual - Spatial                | Bodily - Kinesthetic             |
|----------------------------|------------------------------------|---------------------------------|----------------------------------|
| choral speaking            | problem solving, puzzles           | use of maps, diagrams           | hands-on thinking                |
| lectures                   | measuring                          | photographing                   | experiments                      |
| storytelling               | coding                             | making visual metaphors         | activities                       |
| retelling                  | sequencing                         | making visual analogies         | changing room                    |
| speaking                   | critical thinking                  | mapping stories                 | arrangement                      |
| debating                   | predicting                         | making 3D projects              | creative movement, mime          |
| presenting                 | playing logic games                | painting                        | going on field trips             |
| reading aloud              | collecting data                    | illustrating                    | physical education<br>activities |
| dramatizing                | experimenting                      | collages                        | crafts                           |
| book making                | classifying                        | charting, graphing              | dramatizing                      |
| nonfiction reading         | using manipulatives                | graphic organizers              | using cooperative groups         |
| researching                | scientific model                   | use of symbols                  | dancing                          |
| listening                  | using money                        | visualizing                     | competitive games                |
| process writing            | using geometry                     | sketching, drawing              | relaxation activities,           |
| writing journals           | Socratic questioning               | patterning                      | mindfulness                      |
| group discussions          | scientific demonstrations          | visual puzzles and mazes        | cooking, gardening,              |
| word games                 | calculations                       | art appreciation                | "messy" activities               |
| audio books                | Heuristic Technique                | color cues and coding           | manipulatives                    |
| describe and discuss       | Piagetian cognitive                | computer graphics and           | virtual reality software         |
| interview                  | stretching exercises               | design                          | communicating with body          |
| label                      | computer programming               | idea sketching                  | signals/gestures                 |
| give and follow directions | advanced graphic                   | optical illusions               | tactile materials                |
|                            | organizers                         | visual awareness activities     | perform                          |
|                            | critical thinking<br>opportunities | picture literary<br>experiences | create and construct             |
|                            | data and statistics                | create models                   |                                  |
|                            |                                    | describe in detail              |                                  |

| Musical                         | Interpersonal           | Intrapersonal                 | Naturalistic               |
|---------------------------------|-------------------------|-------------------------------|----------------------------|
| humming                         | classroom parties       | personal response             | reading outside            |
| rapping                         | peer editing            | individual study              | cloud watching             |
| playing background music        | cooperative learning    | personal goal setting         | identifying insects        |
| patterns                        | sharing                 | individual projects           | building habitats          |
| form                            | group work              | journal and log keeping       | identifying plants         |
| playing instruments             | forming clubs           | personal choice in            | using a microscope         |
| tapping out poetic              | peer teaching           | projects                      | dissecting                 |
| rhythms                         | simulations             | independent reading           | going on a nature walk     |
| rhyming                         | social awareness        | self-paced instruction        | build a garden             |
| singing                         | conflict mediation      | private spaces for study      | studying the stars         |
| chants                          | discussing              | one-minute reflection periods | nature observations        |
| sing-song                       | cross age tutoring      | interest centers              | collecting rocks           |
| mood music                      | study group             | personal connections          | making bird feeders        |
| musical concepts                | brainstorming           | options for homework          | classifying                |
| linking old tunes with concepts | interactive software    | choice time                   | sorting                    |
| creating new melodies for       | social situations       | self-teaching programmed      | investigating              |
| concepts                        | people sculpting        | instruction                   | identifying                |
| music software or               | partner work/activities | self-esteem activities        | analyzing                  |
| technology                      | role-playing            | exposure to inspiration/      | using criteria to organize |
| limericks                       |                         | motivational curricula        |                            |
|                                 |                         | conferencing and<br>meetings  |                            |

## STUDENT LEARNING PREFERENCES QUICK-GLANCE

| Student Name                                    | Class/Subject<br>           | Peri<br>Day    |           |       |
|---|-----------------------------|----------------|-----------|-------|
| Place a check in the box that be                | st describes how you feel a | bout the state | ment.     |       |
|   |                             | Seldom         | Sometimes | Often |
| I remember more about a subject t               | hrough lecture.             |                |           |       |
| I prefer using maps, pictures, and g            | graphs to find information. |                |           |       |
| I like to take notes.                           |                             |                |           |       |
| I like to create posters/models.                |                             |                |           |       |
| I prefer explanations along with diadirections. | agrams, graphs, or visual   |                |           |       |
| I enjoy making graphs and charts.               |                             |                |           |       |
| I remember best by picturing thing              | s in my head.               |                |           |       |
| I like jigsaw puzzles and mazes.                |                             |                |           |       |
| I prefer to learn by listening instea           | d of reading.               |                |           |       |
| I remember best by writing things               | down several times.         |                |           |       |
| I like working in groups with my pe             | ers.                        |                |           |       |
| I like answering questions in class.            |                             |                |           |       |
| I feel confident in my writing skills.          |                             |                |           |       |
| I like to volunteer for activities and          | assisting in class.         |                |           |       |
| I like using technology to learn.               |                             |                |           |       |
| I like being a group leader.                    |                             |                |           |       |
| The type of tests that I like best are          | e short essay.              |                |           |       |
| The type of tests that I like best are          | e fill-in the blank.        |                |           |       |
| The type of tests that I like best are          | e multiple choice.          |                |           |       |
| The type of tests that I like best are          | e verbal tests.             |                |           |       |

I like taking tests on the computer best.

## STUDENT ENGAGEMENT PROFILE DIRECTIONS

To use this tool effectively, one teacher will instruct while the other teacher collects data. Begin the class assuming that all students are engaged. As soon as you see a student disengaged, put the time in the top half of the box. When the student becomes re-engaged put the time in the bottom half of the box.

This tool may indicate one of the following:

- Quality of your transitions
- Effectiveness of instructional strategy
- Seating configurations
- · Indicator of routines and procedure effectiveness
- Possible classroom distractions
- Student engagement patterns by period (i.e. medications)

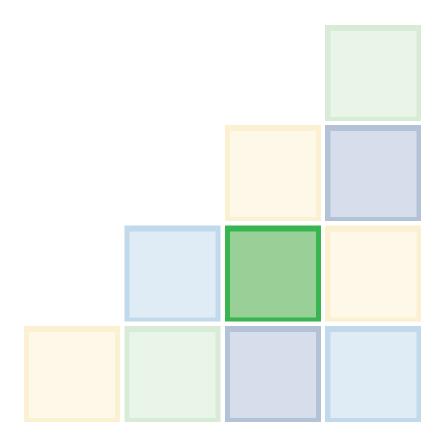
Students Learning Styles Inventories online:

Edutopia: http://www.edutopia.org/multiple-intelligences-assessment

## STUDENT ENGAGEMENT PROFILE

| Grade Subject Period |  |
|----------------------|--|
|----------------------|--|

| Class Roster | Lang.<br>Style |  |  |  | Comments |
|--------------|----------------|--|--|--|----------|
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |
|              |                |  |  |  |          |



# SECTION V: STUDENT/TEACHER ASSESSMENT TOOLS

The following tools give Co-teachers a targeted perspective on their student evaluation system and student performance:

- · Formative Classroom Performance Assessment Data
- · Teacher Grading Profile
- · Student Performance Assessment Profile

## **ASSESSMENTS**

Assessments are essential in the instructional process and are to be utilized on an on-going basis.

## **Three Types of Assessments:**

- Pre-Assessment
- Formative Assessment
- Summative Assessment

#### **Pre-assessment**

Pre-assessments are used to establish a baseline of students' prior content knowledge. This information will help guide the instruction to fit the needs of the student/classroom.

## **Examples of Pre-Assessment Strategies:**

- Previous year's standardized test data
- Pre-test
- · Individual Graphic Organizers
- Individual KWL Charts
- · Pre-load elements of prior content knowledge of lesson
- Observations and student performance

#### **Formative Assessment**

Formative assessments are used to continuously gauge student content knowledge during the learning process. Formative assessments provide information on student needs, assist in planning student activities and instruction, and provide feedback to students on their progress.

### **Examples of Formative Assessment Strategies:**

- Iournals
- Graphic Organizers
- Quizzes
- Presentations/Portfolios
- Exit Cards
- Probing questions

#### **Summative Assessment**

Summative assessments occur at set points in time. Summative assessments are used to determine cumulative student achievement, needs and proficiency levels at the end of a lesson.

## **Examples of Summative Assessment Strategies:**

- Unit test
- Benchmark tests
- Authentic Assessment
- Portfolio Review
- State Tests

#### **Resources**

The IRIS Center for Training Enhancements. (2010). Differentiated Instruction: Maximizing the Learning of All Students Retrieved on August 26, 2015 from http://iris.peabody.vanderbilt.edu/module/di/

Tomlinson & Imbeau (2010) - Leading and Managing a Differentiated Classroom

McTighe, Jay and Carol Ann Tomlinson. <u>Integrating Differentiated Instruction and Understanding by Design</u>. ASCD: Alexandria, 2006.

This guidance document was adapted from various sources including: http://www.tecweb.org/styles/gardner.html

## TEACHER GRADING PROFILE & STUDENT PERFORMANCE ASSESSMENT PROFILE

The following tool is a two-part diagnostic. The first part analyzes the contributing elements of the teacher's grading profile. The second part provides detailed interpretation of how the individual student performed in relationship to the assessment components of the teacher's grading profile. The next two pages are pictures of the two tools. Examples and detailed instructions on how to use this tool are provided on RESA 6 website.

General instructions:

#### **TEACHER GRADING PROFILE**

- I. Fill in headings as appropriate
- II. Teacher enters the total points for the individual grade components. Do not enter possible points in the Modified Grade area\*
- III. The tool automatically calculates the teacher's grading profile
- IV. The tool provides percentages for each category contribution to the total grade
  - a. Provides effectiveness of each component for the class
  - b. Self analyzes teacher grading system
- V. Calculates by category average percentage of student performance

## STUDENT FORMATIVE PERFORMANCE ASSESSMENT PROFILE

- I. Fill in heading as appropriate
- II. Enter points earned per grade in the appropriate category
- III. For the individual student, enter any points earned and point possible based on IEP/504 modifications in shaded Modified Grade area
  - a. Be sure to enter a zero for the assessment in the category that the modified points replaced
- IV. The tool automatically calculates the percentage of each student's categorical contribution to the total grade, as well as, the cumulative final grade

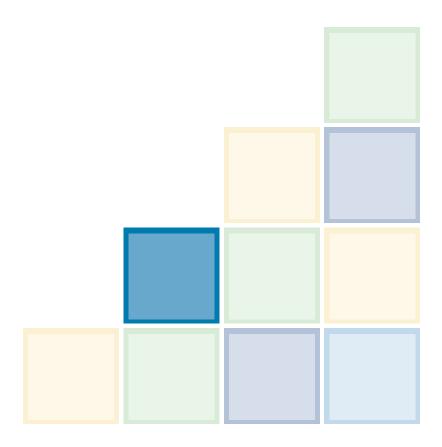
<sup>\*</sup>Be sure to properly weigh the value of each assessment component.

## SAMPLE TEACHER GRADING PROFILE

|                      |  |          |       | 1        | <b>Teacher</b> | Grading 1 | Profile |          |       |          |          |          |              |
|----------------------|--|----------|-------|----------|----------------|-----------|---------|----------|-------|----------|----------|----------|--------------|
|                      | Teacher  |          |       |          |                |           |         |          |       |          |          |          |              |
| Gradin               | g Period   |          |       |          |                |           |         |          |       |          |          |          |              |
|                      | Subject  |          |       |          |                |           | Date    |          |       |          |          |          |              |
|                      | ,  |          |       |          |                |           |         |          |       |          | Cla      | ass      |              |
|                      | Test   |          | Qı    | uiz      | Clas           | swork     | Home    | work     | Proj  | ects     | Particip | ation*   |              |
|                      | Enter  | Points   | Enter |          | Enter          |           | Enter   | Points   | Enter |          | Enter    |          |              |
|                      |  | Possible |       | Possible |                | Possible  |         | Possible |       | Possible |          | Possible |              |
|                      |  |          |       |          |                |           |         |          |       |          |          |          |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
|                      |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        |              |
| Reserved             |  |          |       |          |                |           |         |          |       |          |          |          |              |
| for                  |  |          |       |          |                |           |         |          |       |          |          |          |              |
| Individual           |  |          |       |          |                |           |         |          |       |          |          |          |              |
| Modified             |  |          |       |          |                |           |         |          |       |          |          |          |              |
| Grades               |  |          |       |          |                |           |         |          |       |          |          |          |              |
|                      |  |          |       |          |                |           |         |          |       |          |          |          | Total Points |
| Totalo               |  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        | Possible     |
| Totals<br>Percentage | 0.0  | 0        |       | 0        |                | 0         |         | 0        |       | 0        |          | 0        | 0            |
| reiteillage          | 0.0  | 0/0      |       |          |                |           |         |          |       |          |          |          |              |
| % of total           |  |          |       |          |                |           |         |          |       |          |          |          |              |
| points               | 0.0  | 0.00%    |       |          | 0.00%          |           |         | 0%       | 0.00% |          | 0.00%    |          |              |
|                      |  |          |       |          |                |           |         |          |       |          |          |          |              |
|                      |  |          |       |          |                |           |         |          |       |          |          |          |              |
|                      | *Classroom Participation as defined by the teacher |          |       |          |                |           |         |          |       |          |          |          |              |

## SAMPLE STUDENT PERFORMANCE ASSESSMENT PROFILE

|            |          |          | S  | tudent l | Perform | ance Asse | essment l | Profile  |        |           |          |          |              |
|------------|----------|----------|--|----------|---------|-----------|-----------|----------|--------|-----------|----------|----------|--------------|
|            | Teacher  |          |  |          |         |           | Student   |          |        |           |          |          |              |
| Gradin     | g Period |          |  |          |         |           |           |          |        |           |          |          |              |
|            | Subject  |          |  |          |         |           | Date      |          |        |           |          |          |              |
|            |          |          |  |          |         |           |           | Class    |        |           |          |          |              |
|            | Te       |          |  | ıiz      | Clas    | swork     | Home      |          |        | ects      | Particip | ation*   |              |
|            | Points   | Points   | Points   | Points   | Points  | Points    | Points    | Points   | Points | Points    | Points   | Points   |              |
|            | earned   | Possible | earned   | Possible | earned  | Possible  | earned    | Possible | earned | Possible  | earned   | Possible |              |
|            |          | ,        |  |          |         |           |           |          |        |           |          |          |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | ō        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
|            |          | 0        |  | 0        |         | 0         |           | 0        |        | 0         |          | 0        |              |
| Enter      |          |          |  |          |         |           |           |          |        |           |          |          |              |
| Modified   |          |          |  |          |         |           |           |          |        |           |          |          |              |
| Grades     |          |          |  |          |         |           |           |          |        |           |          |          |              |
| Here       |          |          |  |          |         |           |           |          |        |           |          |          |              |
|            |          |          |  |          |         |           |           |          |        |           |          |          | Total Points |
|            |          |          |  |          |         |           |           |          |        |           |          |          | Possible     |
| Totals     | 0        |          | 0  |          |         |           | 0         |          |        |           |          |          | 0            |
| Percentage | 0.0      | 0%       | 0.0  | 0%       | 0.0     | 00%       | 0.0       | 0%       | 0.0    | 0%        | 0.0      | 0%       |              |
| % of total |          |          |  |          |         |           |           |          |        |           |          |          |              |
| points     | 0.0      | 0%       | 0.0  | 0%       | 0.0     | 00% 0.00  |           | 0.00%    |        | 0.00%     |          | 0%       |              |
|            |          |          | *Classroom Participation as defined by the teacher |          |         |           |           |          |        | e teacher |          |          |              |



# SECTION VI: STRATEGIES TO INDIVIDUALIZE LEARNING

Teaching students what they don't know, when you find out they don't know it, and teach it in a way that they will understand:

• Differentiated Instruction (DI)

## **EXECUTIVE SUMMARY**

- 1. Know students learning styles CTGM-Student Learning Style Inventory, IEP, 504
- 2. Utilize pre-assessment techniques to know students beginning skill sets
- 3. Recognize the need to use multiple instructional strategies to meet the various student learning styles (linguistic/language, musical, bodily kinesthetic, intrapersonal, logical/mathematical, spatial/visual, interpersonal and naturalist)
- 4. Utilize different teaching strategies (direct instruction, inquiry-based learning, cooperative learning, and information processing models)
- 5. Engage students in a variety of instructional activities that makes sense to them
- 6. Employ different grouping formats for instruction (e.g., whole-class, small groups, independent instruction) and use flexible grouping
- 7. Implement Rigor/Relevance Framework to broaden students' knowledge of key concepts
- 8. Provide various methods for students to demonstrate understanding (journals, graphic organizers, quizzes, presentations/portfolios, exit cards, models/structures, etc.)

## SUCCESSFUL DIFFERENTIATED INSTRUCTION STRATEGIES

Differentiated instruction (DI) is not a one-size-fits-all approach but a framework for effective teaching that involves providing students with different avenues to acquire content; to process, construct or make sense of ideas; and to develop teaching materials and assessment measures so that all students within a classroom can learn effectively, regardless of differences in ability.

## **Planning for Differentiated Instruction:**

- Know your students. Use previous student data and student learning style inventory to determine what type of learning styles your students have: linguistic/language, musical, bodily kinesthetic, intrapersonal, logical/mathematical, spatial/visual, interpersonal and naturalist. It is also important to know what their interests are and what level of knowledge they already have in content areas.
- Utilize different teaching strategies: direct instruction, inquiry-based learning, cooperative learning, and information processing models.
- Implement a variety of instructional activities. Engaging students with instructional activities will challenge and motivate students to apply what they have learned in ways that make sense to them.

## Some challenges for teachers planning DI:

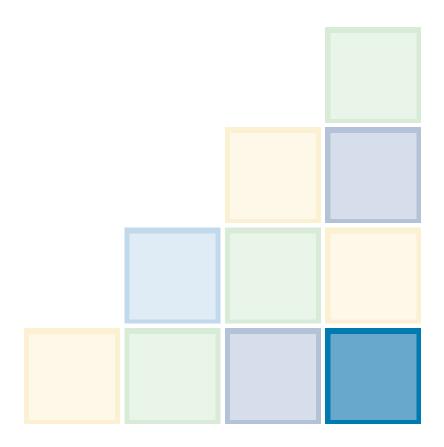
- Some students' needs vary across content areas (ex. some students may do well in reading but struggle in math).
- Some students' needs vary within content area (ex. some students do well with addition but struggle with fractions).
- Some students' needs vary across the school year (ex. at the beginning of the year, some students may struggle with reading but improve as a result of instruction).
- Consideration must be given, in the initial planning stages, for meeting the potential broad range of physical, emotional, intellectual and functional needs of individual students as related to basic principles of Universal Design for Learning.

## **4 Ways to differentiate instruction:**

- Content—the knowledge and skills students need to master the content.
  - » The same content and skills are taught to all students, however, the curriculum to teach the content may be different for each student.
- Process—the activities students use to master the content.
  - » The same content and skills are taught to all students but varying activities should be used to teach the content. Teachers should understand students' interest, readiness and learning profile to determine activities.
- · Product—the method students use to demonstrate learning of the content.
  - » The teacher will assess content knowledge for each student at the end of a unit but provide students with different ways to demonstrate that knowledge.
- Learning Environment the way the classroom accommodates individual learning styles.

## **DI Strategies:**

- Use a variety of instructional strategies (i.e. incorporation technology, summarizing and note-taking, cooperative learning).
- Provide students with options to the same material (i.e. visual, auditory and kinesthetic).
- Assess students on an ongoing basis to determine their readiness levels (i.e. teacher-made probing questions, quizzes).
- · Use formative assessment results to adjust instruction as needed, either real-time or planned.
- Provide a variety of options for how students can learn and demonstrate their knowledge (i.e. presentations, narrative).
- Strive to make lessons engaging and meaningful (i.e. learning styles inventory).
- Employ different grouping formats for instruction (i.e. whole-class, small groups, independent instruction) and use flexible grouping.
- Recognize students' strengths and weaknesses as learners (i.e. student learning styles inventory).
- · Refer to Section IV for student learning styles inventory.



# SECTION VII: PHYSICAL CLASSROOM LAYOUT

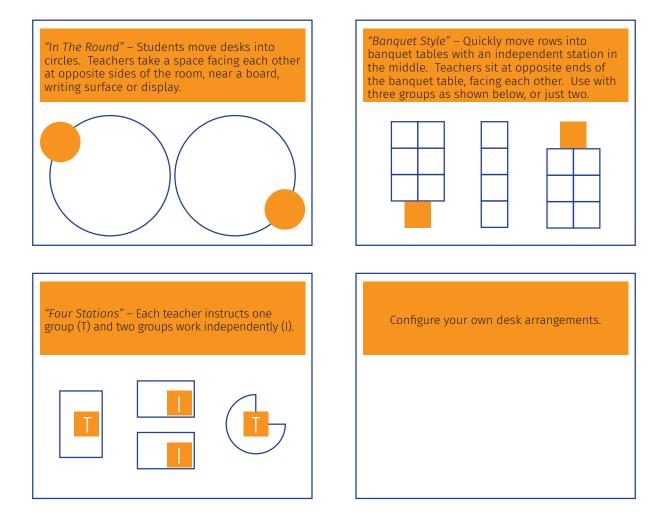
## Creating the appropriate environment enhances student learning and productivity:

· · · Classroom physical arrangement and desk arrangement

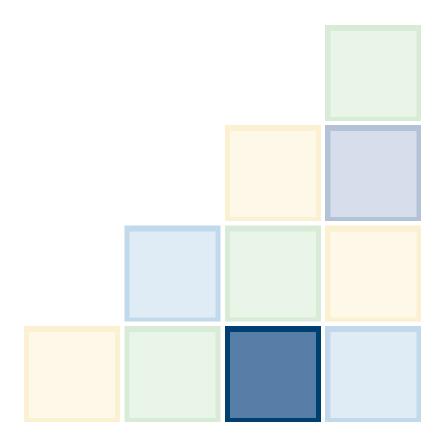
## PHYSICAL CLASSROOM ARRANGEMENT

#### **OPTIMIZE YOUR INSTRUCTIONAL SPACE**

Review the physical environment of each room to eliminate unnecessary material/equipment to expand the learning space to accommodate the variety of Co-teaching styles. Consideration must be given, in the initial planning stages, for meeting the potential broad range of physical, emotional, intellectual and functional needs of individual students as related to the physical environment and the basic principles of Universal Design for Learning. As an example: create space for students to move.



Desk Arrangement: Copyright 2014 A. M. Beninghof



# **SECTION VIII: PARENT ENGAGEMENT**

Parent communication, participation and engagement are critical components in the life-long learning process of students:

- · Sample Parent Letter
- Parent Survey

#### SAMPLE PARENT LETTER

Dear Parents,

We will be co-teaching your child's class this semester/year and want to share some information with you about the class. Co-teaching is an approach that involves two professionals teaching the same class together by sharing their expertise with the students. Co-teaching is being used in classrooms across the country as a way to meet the students' diverse needs that range from students who may need some extra support to those who may need additional challenges to stay engaged.

Each of the teachers in co-taught classrooms possess differing areas of expertise and collaborate to ensure that individual student's needs are met. Co-teachers will use a multitude of instructional strategies to address the variety of student learning styles in the classroom. Co-teachers equally share responsibility for classroom management while working together to assess student learning and to make grading decisions. A few examples of instructional techniques that may be used include two teachers sharing instruction in the front of the room or one teacher leading instruction while the other teacher circulates the classroom to assist individual students. This allows for the individualization of instruction for all students.

We are excited about the opportunities co-teaching will provide to all students in this class. If you have any questions about co-teaching or specific questions about your child, feel free to contact either of us by phone or email. Our contact information is listed below.

Sincerely,

Co-teacher A Phone: Email:

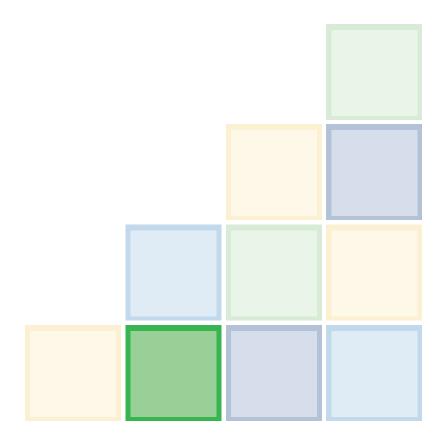
Co-teacher B Phone: Email:

# PARENT SURVEY

| Directions: We would like your feedback on the co-taught class(es) in which your child has           |
|--|
| participated. Please take a moment to circle the number that best describes your opinion, and return |
| the survey in the envelope provided.   |

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly Agree

| 1. My child enjoyed h                   | having two teachers in class.                | 1        | 2      | 3      | 4 | 5 |
|---|--|----------|--------|--------|---|---|
| 2. My child received class.             | more assistance by having two teachers in    | 1        | 2      | 3      | 4 | 5 |
| 3. My child's academ teachers in class. | nic performance improved by having two       | 1        | 2      | 3      | 4 | 5 |
| 4. I was adequately i                   | nformed about the co-teaching program.       | 1        | 2      | 3      | 4 | 5 |
| 5. Communication w sufficient.          | ith the teachers in the co-taught class was  | 1        | 2      | 3      | 4 | 5 |
| 6. My child accompli                    | shed more in a co-taught class.              | 1        | 2      | 3      | 4 | 5 |
| Do you have any addit                   | ional comments about your child's experience | in a co- | taught | class? |   |   |
|   |  |          |        |        |   |   |
|   |  |          |        |        |   |   |
|   |  |          |        |        |   |   |
| Name (Optional)                         | Date   |          |        |        |   |   |
| manne (Optional)                        | Date   |          |        |        |   |   |

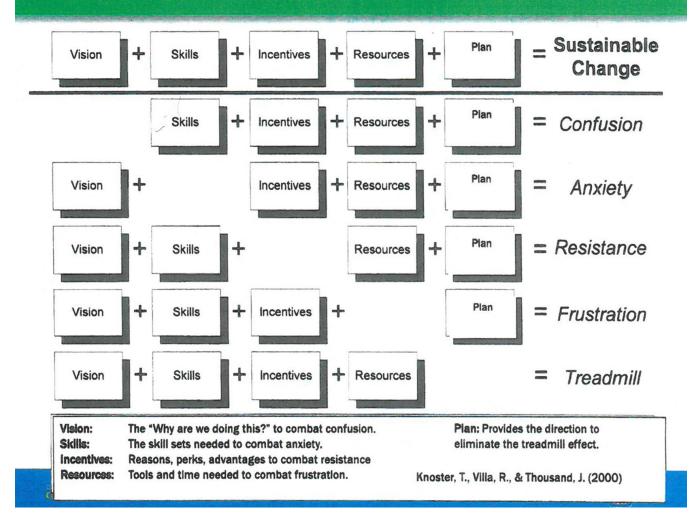


# **SECTION IX: RESOURCES**

# Supplementary materials and resources are essential components in the successful 21st Century learning environment:

- · Conditions for Successful Implementation
- Options/Feasibility Tool
- Augmented Reality
- Apps
- Websites

# Conditions for Successful Implementation



#### DIRECTIONS FOR OPTIONS RANKING TOOL

Purpose: The purpose of this tool is to resolve issues consensually at the co-teaching, grade level, and building level.

- 1. Construct a focus statement that specifically addresses the issue and enter it.
- 2. Explain to the group that they will confer and come to a consensus on a number of possible options/solutions one at a time.
- 3. Each option/solution statement will be recorded under the Options section, A-J.
- 4. The group will then discuss and assign two separate number values (Feasibility/Quality of Option, 1-10; 10 being the highest) to each solution. These options/solutions values will be recorded under the Coordinate Points section.
- 5. These two numerical values will be recorded as a point (x, y) on the graph. The "x" axis point (horizontal) will represent the Feasibility Factor of the solution. The "y" axis point (vertical) will represent the Quality of the Option/Solution.
- 6. Once all of the solution points are recorded on the graph, those points highest on the "y" Quality axis and farthest out on the "x" axis will be the best solutions that can be done immediately. Rank and record in the "Best Quality/Feasibility" Column.

|       |                  | OP. | TIONS | SRAN | IKING | TOC | L |   |   |    |      |   |     |
|-------|------------------|-----|-------|------|-------|-----|---|---|---|----|------|---|-----|
| ١,    | Focus Statement: |     |       |      |       |     |   |   |   |    |      |   |     |
|       |                  |     |       |      |       |     |   |   |   |    |      | Best Quality /<br>Feasibility<br>Use Letter A-J<br>below to |     |
|       | 10               |     |       |      |       |     |   |   |   |    |      | 1   |     |
| Q     | 9                |     |       |      |       |     |   |   |   |    |      | 2   |     |
| U     | 8                |     |       |      |       |     |   |   |   |    |      | 3   |     |
| А     | 7                |     |       |      |       |     |   |   |   |    |      | 4   |     |
| L     | 6                |     |       |      |       |     |   |   |   |    |      | 5   |     |
| ı     | 5                |     |       |      |       |     |   |   |   |    |      | 6   |     |
| т     | 4                |     |       |      |       |     |   |   |   |    |      | 7   |     |
| Υ     | 3                |     |       |      |       |     |   |   |   |    |      | 8   |     |
|       | 2                |     |       |      |       |     |   |   |   |    |      | 9   |     |
|       | 1                |     |       |      |       |     |   |   |   |    |      | 10  |     |
|       | 0 1              | 2   | 3     | 4    | 5     | 6   | 7 | 8 | 9 | 10 |      |   |     |
|       |                  |     |       |      |       |     |   |   |   |    |      |   |     |
|       |                  |     | FEAS  | SIBI | LITY  |     |   |   |   |    |      |   |     |
|       |                  |     |       |      |       |     |   |   |   |    | Coor | dinate Points   |     |
| ption | ns               |     |       |      |       |     |   |   |   |    | (Fea | sibility,Quali  | ty) |
|       |                  |     |       |      |       |     |   |   |   |    | A.   |   |     |
|       |                  |     |       |      |       |     |   |   |   |    | в.   |   |     |
|       |                  |     |       |      |       |     |   |   |   |    | c.   |   |     |
|       |                  |     |       |      |       |     |   |   |   |    | D.   |   |     |

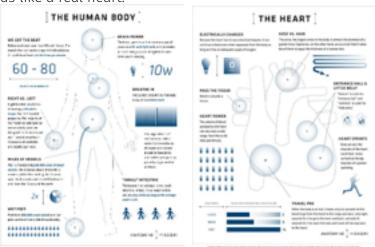
#### AUGMENTED REALITY

Augmented Reality (AR) is an enhanced image or environment that is viewed on a screen and is produced by overlaying computer-generated images, sounds, or other data on a real-world environment. Basically, it makes the picture look 3D/4D. The following APPs are great educational examples of this technology.

#### Dagri

#### **Anatomy 4-D** (http://daqri.com/project/anatomy-4d/#.Vh6xE\_lVhBf)

This free APP allows the user to view and study the various systems of the human body. The beating heart looks and sounds like a real heart.



#### **Elements 4-D** (http://elements4d.dagri.com/)

This free APP brings the study of chemistry to life and enhances the study of chemistry exponentially. Print the patterns to make the cubes or order the wooden set. This site has great lesson plans for elementary, middle, and high school.



## **Quiver formerly coLAR** (http://quivervision.com/)

This free APP turns coloring into an "interactive" 3D rendering tailored with the colors incorporated by the student. Some of the coloring sheets have a cost, but many are free.



#### **AR Flashcards** (www.arflashcards.com)

Learning the alphabet was never this much fun. AR Flashcards have all the letters of the alphabet along with an animal that begins with each letter. When the 3D animal on the screen is touched, the letter and the name of the animal is pronounced. There are APPs available for Space and Shapes/Colors for \$2.99 each.



## TECHNOLOGY APPS AND SITES

#### Sites

| Name                     | URL   | Description  |
|--------------------------|---|--|
| Hour of Code*            | www.code.org  | Anybody can learn computer coding.   |
| Scratch                  | https://scratch.mit.edu/                                      | Create games, stories, and animations – share around the world!  |
| Scratch Jr.              | http://www.scratchjr.org/about.html                           | Introductory programming language that allows young children (ages 5-7) to create their own interactive games and stories. |
| Run Marco!               | http://marco.allcancode.com/<br>iPad, Android, and Chrome app | Free App to learn coding.  |
| Alice                    | http://www.alice.org/index.php                                | Turns abstract into animation.   |
| Code Studio              | https://studio.code.org                                       |  |
| Codesters                | www.codester.com  |  |
| Girls Who Code           | www.girlswhocode.org  |  |
| Grok Learning            | www.groklearning.com  | Learn to code –<br>first two modules are free  |
| Intel's Code for Good    | https://software.intel.com/en-us/<br>codeforgood              |  |
| Raspberry Pi Foundations | www.raspberrypi.org   |  |
| Thinkersmith             | http://thinkersmith.org                                       |  |
| Wonder Workshop          | https://www.makewonder.com                                    |  |

<sup>\*</sup>Hour of Code is a global movement by Computer Science Education Week and Code.org reaching tens of millions of students in 180+ countries through a one-hour introduction to computer science and computer programming.

## **APPs**

| Name                             | URL  | Description   |
|----------------------------------|--|---|
| My Script Calculator App         | https://itunes.apple.com/<br>us/app/myscript-calculator/<br>id578979413?mt=8                     | Turns handwriting into results                                |
| Geometry Pad App                 | https://itunes.apple.com/md/app/<br>geometry-pad/id517461177?mt=8                                | Similar to My Script Calculator                               |
| Number Pieces App                | https://itunes.apple.com/au/app/<br>number-pieces-by-math-learning/<br>id605433778?mt=8          | Place Value App   |
| The Evolution of the Web         | http://www.evolutionoftheweb.com/  | Interactive Chart show how the Web evolved                    |
| Google Earth Flight<br>Similator | http://www.gearthblog.com/blog/<br>archives/2014/04/using-google-<br>earth-flight-simulator.html | Fly a plane around Earth!                                     |
| Curiosity                        | https://curiosity.com/   | Quality videos  |
| l packing                        | iTunes   |   |
| Duolingo                         | https://en.duolingo.com/   | Learn a language for free forever – many languages available. |

## Websites

| Name                             | URL  | Description  |
|----------------------------------|--|--|
| Google Earth Flight<br>Similator | http://www.gearthblog.com/blog/<br>archives/2014/04/using-google-<br>earth-flight-simulator.html | Fly a plane around Earth!                                    |
| Curiosity                        | https://curiosity.com/   | Quality videos   |
| Parapara                         | http://parapara-editor.mozlabs.jp/<br>sandbox  | Simple animation drawing tool                                |
| Sketchlot                        | http://www.sketchlot.com/  | Web whiteboard   |
| Photos for Class                 | http://photosforclass.com/   | Classroom appropriate images, automatically sites the author |
| Vocaroo                          | http://vocaroo.com/  | Voice recorder   |
| ZoomWV                           | http://zoomwv.k12.wv.us/Dashboard/<br>portalHome.jsp   | Data to assist in education decision making                  |
| Open Library                     | https://openlibrary.org/   | Borrow and read books  |

| Name                 | URL  | Description  |
|----------------------|--|--|
| Google Public Data   | http://www.google.com/publicdata/<br>directory                         | Find information on anything   |
| Seesaw               | http://web.seesaw.me/  | Student driven digital portfolios  |
| My Maps by Google    | https://www.google.com/maps/d/<br>home                                 | Create maps  |
| Pechaflickr          | http://pechaflickr.net/  | "Enter a tag, press play, and see<br>how well you can communicate a<br>coherent message illustrated by<br>20 random photos, each one on<br>screen for 20 seconds." |
| Google World Wonders | https://www.google.com/<br>culturalinstitute/project/world-<br>wonders | "By using our Street View technology, Google has a unique opportunity to make world heritage sites available to users across the globe."                           |
| ArtsEdge             | https://artsedge.kennedy-center.org/<br>educators.aspx                 | Kennedy Center's free resource for teaching and learning in, through, and about the arts.  |
| Biblion              | http://exhibitions.nypl.org/biblion/                                   | The Boundless Library Engage.Connect.Explore.  |
| Videonot.es          | http://www.videonot.es/  | Synchronize notes with videos!   |
| Purpose Games        | http://www.purposegames.com/   | "The #1 place for quizzes and<br>knowledge games!"<br>Create your own!   |
| Watchkin             | https://watchkin.com/  | "WATCH YOUTUBE VIDEOS WITHOUT DISTRACTIONS IN A FAMILY-FRIENDLY ENVIRONMENT."  |
| Pixabay              | https://pixabay.com/   | Many free pictures   |
| Read, Write, Think   | http://www.readwritethink.org  | Great lesson plans, interactives for ELA.  |
| This is Sand         | http://thisissand.com/   | Stress Reliever  |
| Save Fred            | http://www.msichicago.org/play/<br>codefred/#.VcO2HvnzPR9              | Medical-related game.  |
| Coggle.it            | https://coggle.it/   | A clear way to share complex information.  |
| Stupeflix            | https://studio.stupeflix.com/en/                                       | Make amazing videos in seconds!  |

| Name                                 | URL  | Description  |
|--------------------------------------|--|--|
| Google Smarty Pins                   | http://smartypins.withgoogle.com/                                | Google Maps based geography and trivia games.  |
| Real Time Board                      | https://realtimeboard.com/3/                                     | "The simplest tool for remote collaboration."  |
| Super Tracker                        | https://www.supertracker.usda.gov/                               | Track foods, fitness, and health.  |
| Google Art Project                   | https://www.google.com/<br>culturalinstitute/project/art-project | Google Cultural Institute  |
| Ancestry Classroom                   | http://ancestryk12.com/  | Free for students!   |
| Tackk                                | https://tackk.com/   | Connect with friends, be creative, and have fun conversations. Requires sign-up.   |
| Adobe Education<br>Exchange          | http://edex.adobe.com/   | "FREE RESOURCES"   |
| Digital Public Library of<br>America | http://dp.la/  | Public Library   |
| Easlly                               | http://www.easel.ly/   | Create and share visual ideas – many templates.  |
| Dyslexie Font                        | http://www.dyslexiefont.com/en/<br>dyslexia-font/                | Font for students with dyslexia. Free for students.  |
| Instagrok                            | http://www.instagrok.com/  | "Research any topic with an interactive concept map, which you can customize and share."                                     |
| Storyline Online                     | http://www.storylineonline.net/                                  | SAG Foundation – free electronic books read aloud by famous people.  |
| News ELA                             | https://www.newsela.com/   | Lots of news articles that can be printed at different Lexile levels!  |
| Get Pocket                           | https://getpocket.com/   | "Save interesting articles, videos and more from the web for later enjoyment."   |
| We Give Books                        | http://www.wegivebooks.org/                                      | Free Books!  |
| Phet                                 | http://phet.colorado.edu/  | Interactive simulations for science and math.  |
| Bingo Baker                          | https://bingobaker.com/  | "You can generate hundreds of random Bingo cards and print them using the printer-friendly PDF (with no ads or watermarks)." |

| Name                            | URL   | Description  |
|---------------------------------|---|--|
| math4life Educator<br>Resources | https://wvde.us/math4life/<br>educators/grade-specific-resources/ | Lots of resources to assist with teacher math content knowledge. |
| Desmos                          | https://www.desmos.com/   | Free classroom activities and graphing calculators.              |

#### **Acquiring Accessible Education Materials\* (AEM) for Students**

Definition of AEM: AEM (previously called AIM) are materials that are designed or converted in a way that make them usable across the widest range of student variability. AEM is the exact same content presented in formats other than print. The Individuals with Disabilities Education Act of 2004 (IDEA) requires state and local education agencies to provide printed instructional materials in specialized formats in a timely manner to elementary and secondary school students with disabilities who need them. Students with learning disabilities (SLD) and working in the general education environment may need AEM. Students without IEPs may be more academically successful and/or independent when given a choice of an alternative format. Providing AEM to all students from the beginning of lesson planning is a proactive approach to provide alternative ways for all students to access grade level print materials.

#### **Step by Step Guide to Acquisition**

- Step 1: Identify students that are unable to read traditional grade-level print educational materials, or are unable to read at a rate with comprehension to complete academic tasks with success, or are unable to do it independently across environments.
- Step 2: Complete AEM Navigator to determine if AEM is appropriate. If AEM is appropriate, then the team or individual teacher can work with the student to determine in what environments AEM is needed. To better understand student preferences, the teacher and student can complete the AIM Explorer. The AIM Explorer will help you identify what features of accessible materials are most helpful to the student. The decision of what device and software you need begins here.
- Step 3: To acquire textbooks, first contact the publisher to see if an accessible format is available. If it is not available from the publisher, students with IEPs and a print disability that is documented by a medical doctor may obtain the textbook through Bookshare or Learning Ally. Documentation of AEM should be embedded throughout the IEP. Guidance for this can be found at <a href="http://wvde.state.wv.us/osp/accessiblematerials.html">http://wvde.state.wv.us/osp/accessiblematerials.html</a>. For students without IEPs, districts must purchase accessible textbooks directly from the
  - For students without IEPs, districts must purchase accessible textbooks directly from the publisher. This content may contribute to the type of device and software you will use.
- Step 4: For non-textbook materials, all students with a print disability can obtain materials through Bookshare or Learning Ally and of course, through any open resources available. Examples of these open resources include accessibility features in the hardware, Chrome apps and all the other numerous accessible materials and software available on the Internet. Please note that if implementing Universal Design for Learning, all students, including those without disabilities, should have access to these tools.

See the WVDE AIM Guidance Document for complete details on this process.



Steven L. Paine, Ed.D. West Virginia Superintendent of Schools