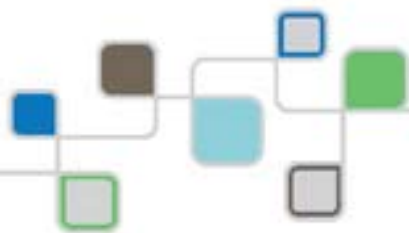


*Process for Advancing Learning
Strategies for Success (PALSS)*

**Guide for Using Classroom Observation Data
to Advance Professional Development[®]**

February 4, 2011



CROSS & JOFTUS

Guide for Using Classroom Observation Data to Advance Professional Development®

Table of Contents

Framework Section

1. Overview	3
2. Continuous Improvement Process (CIP) & Planning Phase	4
3. CIP: Doing Phase	7
4. CIP: Studying Phase	8
5. CIP: Scaling-Up Phase	9

Appendices Section

A. Professional Development Feedback Form	10
B. Continuous Improvement Process for Implementing Classroom Observations Professional Development	11
C. Classroom Observation Form	12
D. Descriptors of Cognitive Levels	13
E. Bloom's Taxonomy and Costas' Levels of Questioning	14
F. Definitions of Research-Based Educational Practices	16
G. Examples of Research-Based Practices	19
H. Demonstrating Knowledge in Multiple Ways	20
I. Implementing Differentiated Instruction	21
J. Planning Model for Academic Diversity	22
K. Alignment Between Teaching and Learning Practices	23
L. Learning Observation Feedback	24
M. Sample Feedback Comments	25
N. Directions for Compiling Data from PALSS Observations	26
O. Template for PALSS Data	27

Reference Section

R-1. Designs for Instructional Planning	29
R-2. Descriptors for Culturally Responsive & Diverse Language Needs	30
R-3. Promoting Effective Practices	31
R-4. Responsibilities for Implementing & Sustaining PALSS	32
R-5. Procedures for Implementing Networking and Coaching Opportunities	33
R-6. Instructional Designs for Academic Diversity	36

1. OVERVIEW

As recently proposed by City, Elmore, Fiarman, and Lee (2009) in *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning*, “Since what goes on in the classroom is at the heart of instructional improvement, a key part of developing an improvement practice is observation.” As proposed by these authors, connecting classroom observations to the “larger context of the system’s improvement strategy” is how to support sustained improvement.¹

The focus of this *Guide for Using Classroom Observation Data as Catalysts for Advancing Professional Development* is HOW to connect classroom observations to systemic improvement practices. The *Guide* provides systematic procedures for using classroom observation data to address the purpose of professional development which according to the National Staff Development Council is that “Every educator engages in effective professional learning everyday so every student achieves” (www.nsdc.org). Specifically, the *Guide* offers consistent practices for implementing the four phases of the *PALSS* program:

PLANNING PHASE: Develop systematic classroom observation procedures to serve as the catalysts for informing and implementing research-based effective educational practices which are predictably linked to increased student achievement;

DOING PHASE: Conduct classroom visits using common criteria, calibrate observation data, and provide feedback to the learning community regarding the extent of implementation of research-based practices;

STUDYING PHASE: Analyze the extent of implementation of effective practices using a consistent protocol for compiling and analyzing observation data;

ACTING FOR CONSISTENT IMPLEMENTATION PHASE: Propose future professional development practices using observation data which indicates priorities needed to advance student achievement; furthermore models of those practices are promoted as prototypes system-wide using collaboration and networking.

The continuous improvement process used to address each of the four outcomes referenced above will involve participants demonstrating each of the practices displayed in **Appendix A: Professional Development Feedback Form.** These practices will be evaluated at the end of this training on this form.

Specific practices related to each of the four phases are displayed on **Appendix B: “Continuous Improvement Process for Implementing Classroom Observations =Professional Development”** and identify the outcomes of this component.

¹ Elizabeth A. City, Richard F. Elmore, Sarah E. Fiarman, and Lee Teitel, *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning* (Cambridge, MA: Harvard Education Press, 2009).

2. CONTINUOUS IMPROVEMENT PROCESS: PLANNING PHASE:

Using classroom observations as the catalysts for implementing research-based effective educational practices which are predictably linked to increased student achievement

a. RATIONALE FOR USING PALSS (PROCESS FOR ADVANCING LEARNING STRATEGIES FOR SUCCESS) CLASSROOM VISITS AS CATALYSTS FOR SYSTEMIC IMPROVEMENT

The 1984 publication of *In Search of Excellence: Lessons from America's Best Run Companies* led to increased interest in the management process of observing work sites and providing frequent feedback to enhance worker productivity. This concept was applied to education in 1990.² Classroom observations were specifically targeted since it had been estimated that a teacher makes over 1,000 decisions a day and that during five minutes in a classroom, we typically could observe approximately 20 decisions being made.³

The goal of periodic feedback for teachers and administrators based on classroom observations is to inform future teaching/learning practices with data that are analyzed in professional learning communities. There is no intent to evaluate individual teacher performance. Rather, *PALSS* is a collaborative process for gathering, analyzing, and applying information about practices that consistently and systematically enhance student learning.

The unique nature of *PALSS* is that the data collected during visits is used to focus the work of educators in professional learning communities as they examine what instructional practices have the greatest impact on advancing achievement and what opportunities need to be provided to access the next learning levels for students. The pages that follow summarize 25 years of research validating the merits of classroom visits. The explanations associated with each of these citations are summarized in Downey et al. (2004).⁴

(1) Enhanced teacher satisfaction comes from higher frequency of classroom visits which results in 25% more students being cognitively engaged in the lesson

-Frase, 2001: "A Confirming Study of the Predictive Power of Principal Classroom Visits on Efficacy and Teacher Flow Experiences." American Education Research Association Paper.

-Galloway & Frase, 2003: "A Methodological Primer for Estimating the Effects of Flow in the Classroom." American Education Research Association Paper.

(2) Improved teacher self-efficacy has a strong predictive link to student achievement

-Chester & Beaudin, 1996: "Efficacy Beliefs of Newly Hired Teachers in Urban Schools." *American Educational Research Journal*.

(3) Improved teacher self-efficacy has a strong predictive link to student achievement

² Frase & Hetzel (1990). *School Management by Wandering Around*. See also Eisner (2002). "The Kinds of Schools We Need." *Phi Delta Kappan*, 83, 576-583.

³ Downey, Steffy, English, Frase, & Poston (2004). *The Three- Minute Classroom Walk-Through*. Thousand Oaks, CA: Corwin Press.

⁴ Ibid.

-Chester & Beaudin, 1996: "Efficacy Beliefs of Newly Hired Teachers in Urban Schools." *American Educational Research Journal*.

-Frase, 2001: "A Confirming Study of the Predictive Power of Principal Classroom Visits on Efficacy and Teacher Flow Experiences." American Educational Research Association Paper.

-Galloway & Frase, 2003: "A Methodological Primer for Estimating the Effects of Flow in the Classroom." American Education Research Association Paper

(4) Improved teacher attitudes toward professional development were evident when administrators were in classrooms more often, teachers express higher regard for professional development practices

-Frase, 2001 & 2003: "Policy Implications for School Work Environments." American Education Research Association Paper

-Galloway & Frase, 2003: "A Methodological Primer for Estimating the Effects of Flow in the Classroom." American Education Research Association Paper

(5) Improved teacher attitudes toward teacher appraisal were evident by teachers whose classrooms were visited more frequently

-Frase, 1998, 2001: "An Examination of Teachers' Flow Experiences, Efficacy, and Instructional Leadership in Large Inner-City and Urban School Districts." American Education Research Association Paper.

-Galloway & Frase, 2003: "A Methodological Primer for Estimating the Effects of Flow in the Classroom." American Education Research Association Paper.

(6) Increased perceived teacher efficacy of other teachers and of the school is related to the frequency of classroom visits

-Frase, 1998, 2001: "An Examination of Teachers' Flow Experiences, Efficacy, and Instructional Leadership in Large Inner-City and Urban School Districts." American Education Research Association Paper.

-Frase 2001: "A Confirming Study of the Predictive Power of Principal Classroom Visits on Efficacy and Teacher Flow Experiences." American Education Research Association Paper.

-Galloway & Frase, 2003: "A Methodological Primer for Estimating the Effects of Flow in the Classroom." American Education Research Association Paper

(7) Improved classroom instruction occurs with higher frequency of classroom visits and constant focus on the instructional core

-Marzano, Pickering, & Pollock, 2001: *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Association for Supervision and Curriculum Development.

-Freedman & LaFleur, January 2003: "Principal Visibility and Classroom Walk-Throughs." Paper presented at the International Congress of School Effectiveness & School Improvement.

-Teddlie, Kirby, & Stringfield, 1989: "Effective Versus Ineffective Schools: Observable Differences in the Classrooms." *American Journal of Education*.

(8) Improved teacher perception of principal effectiveness increases with the frequency of classroom visits

-Andrews & Soder, 1987: "Principal Leadership & Student Achievement." *Educational Leadership*, 44 (6), 9-11.

-Freedman & LaFleur, 2002: "Making Leadership Visible and Practical: Walking for Improvement." American Educational Research Association Paper.

-Heck, Larsen, & Marcoulides, 1990: "Instructional Leadership and School Achievement." *Educational Administration Quarterly*

-Sagor, 1992: "Three Principals Who Made a Difference." *Educational*

Leadership, 49 (5), 13-18.

-Smith & Blasé, 1991: "From Empiricism to Hermeneutics: Educational Leadership as a Practical and Moral Activity." *Journal of Educational Administration*, 29 (1), 6-21.

- Valentine, Clark, Nickerson, & Keefe, 1981: *The Middle School Principal*. National Association of Secondary School Principals.

- Wimpleberg, Teddlie, & Stringfield, 1989: "Sensitivity to Context: The Past and Future of Effective Schools Research." *Educational Administration Quarterly*, 25, 82-107.

(9) Improved student discipline and student acceptance of advice and criticism

-Blasé, 1987: "Dimensions of Effective School Leadership: The Teacher's Perspective." *American Educational Research Journal* 24, 589-610.

-Smith & Blasé, 1991: "From Empiricism to Hermeneutics: Educational Leadership as a Practical and Moral Activity." *Journal of Educational Administration*, 29 (1), 6-21.

(10) Improved teacher-perceived effectiveness of the school increases when administrators visit classrooms frequently

-Frase, 2001: "A Confirming Study of the predictive Power of Principal Classroom Visits on Efficacy and Teacher Flow Experiences." American Education Research Association Paper.

b. RESEARCH-BASED EFFECTIVE EDUCATIONAL PRACTICES

The rationale for why the *PALSS* classroom observation is used was described in the previous section. This section describes what are the "elements of effective pedagogy" targeted during classroom observations. These targeted practices were identified in an accumulated research study conducted by Mid-Continent Research for Education and Learning (McREL) that analyzed over 20 years of studies to provide consistent answers to the question "What types of instructional strategies work best to improve student achievement because they have a high probability of enhancing student achievement for all students in all subject areas at all grade levels?"⁵

The elements of effective pedagogy include the following:

- 1) **CONTEXT**: Classroom Environment/Management Techniques referencing **where** learning occurs;
- (2) **CONTENT**: Curriculum Design referencing **what** content is being presented and how the learning is being sequenced;
- (3) **PROCESS**: Strategies referencing **how** the content is being presented using research-based practices which are predictably linked to gains in student achievement.

⁵ Marzano (1998). *A Theory-Based Meta-Analysis of Research on Instruction*. Aurora, CO: Mid-Continent Research for Education and Learning, ERIC Document Reproduction Services No. ED 427 087.

3. CONTINUOUS IMPROVEMENT PROCESS: DOING PHASE:

Conducting classroom visits using common criteria, calibrating observational data, and providing feedback to the learning community.

This phase consists of the following **three procedures**:

a. First: Identifying the “three elements of effective pedagogy” as the common criteria for assessing the effectiveness of teaching/learning practices:⁶

- (1) Educational Environment/Management Techniques
- (2) Design of Curriculum/Instructional Planning
- (3) Strategies which are research-based and consistently linked to gains in achievement (Additionally, “Marzano’s website serves as a clearinghouse for research-based instructional strategies and it provides direction for other system-wide improvement practices.” <http://marzanoresearch.com>)

The common criteria referenced above are displayed on **Appendix C: “Classroom Observation Form”** (COF) in order to provide a common format for collecting data during visits to classrooms. The explanation of each of the TEACHING and LEARNING practices on the COF are displayed on **APPENDIX F: “Descriptors of Elements of Effective Pedagogy.”**

b. Second: Using a systematic process for “calibrating observational data”. Following each classroom visit, observers are trained to reach consensus regarding their collective analysis of both the “teaching/learning practices” recorded on **Appendix C: Classroom Observation Form.”** This analysis focuses on the nexus of practice between the implementation of the teaching practice and its impact on student learning.

- (1) Each team is to reach consensus regarding the “Teaching” and “Learning” practices observed in each classroom and record their agreed upon data onto ONE MASTER of **Appendix C: “Classroom Observation Form.”**
- (2) Teams are to develop and communicate responses to item #7: “COMMENTS TO TEACHERS” using the process described below.

c. Third: Providing feedback to all teachers who participate in the classroom observation process using a common template such as the one displayed on “**Appendix L: Learning Observation Feedback Form.”** The feedback comments provide descriptions of the impact of research-based teaching practices on student learning. Examples of representative statements are identified on **Appendix M: “Sample Comments Related to Classroom Observations.”**

⁶ Marzano, Pickering, & Pollock (2001). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

4. CONTINUOUS IMPROVEMENT PROCESS: STUDYING PHASE:

Analyzing the extent of implementation of effective practices using the compilation of observation data.

The two most important purposes for conducting systematic observations are: first, to determine the extent to which effective teaching/learning practices are being implemented and second, to identify what future professional development activities are needed to “scale-up effective classroom practices centered on standardized observations of teacher-student interactions.” ⁷

In order to accomplish these two purposes, the following process is to be used when compiling observation data collected during the classroom visits:

a. After conducting class visits as specified in the DOING PHASE, data is to be compiled using the process described on “**Appendix N: Directions for Compiling Data from Observations.**” A recorder from each team is to tally the agreed upon observation data from each classroom by grade level (elementary, middle, high school) onto **Appendix O: “Template for PALSS Observations”** form.

b. Electronically enter onto spreadsheets the composite number of classrooms beside each entry in the “Teaching” or “Learning Practices” columns.

-When the tallied data are entered electronically, it will automatically compute percentages and populate suggested professional development practices for each level of schooling.

c. After finishing one of the levels of schooling, open the tab for whichever level is complete (either elementary, middle or senior high school) and the worksheet will display the percentage of practices demonstrated. To verify correlation of data, cross-check using **Appendix K: “Alignment Between Teaching and Learning Practices.”**

⁷ Pitler & Goodwin (December/January 2009). “Classroom Walk-Throughs: Learning to See the Trees and the Forest.” *The Learning Principal*, Oxford, OH: National Staff Development Council.

5. CONTINUOUS IMPROVEMENT PROCESS: SCALING-UP PHASE:

Proposing future professional development practices using observation data which indicates priorities in order to advance student achievement; furthermore promote models of those practices as prototypes system-wide.

According to *Instructional Rounds in Education: A Network Approach to Improving Teaching and Learning*, “There are pockets of excellence throughout our schools and school systems. Our challenge is to bring those pockets of excellence to scale—to provide for all what our systems currently provide for some.”⁸

The PALSS classroom observation protocol is about using a systematic process to make that happen. The process involves first, defining practices which are predictably linked to “excellence”; second, using consistent procedures for identifying those “pockets of excellence”; and third, sharing and promoting practices that “connect” the classroom observation system to the larger context of the system’s improvement strategy.

This phase involves the following three steps for systematically “connecting” observation data as the catalysts for sharing practices of improvement through professional development:

- a. First, analyze the compilation of classroom observation data summarized on **Appendix O: “Template” on the tabs labeled “Teaching/Learning Practices Graphs.”** Based upon the extent of implementation, prioritize future professional development topics using the following guidelines:
 - (1) Mark as a first priority those effective practices which are “*inconsistently evident*” in less than 29% of the classes visited.
 - (2) Mark as a second priority those effective practices which are “*minimally evident*” in 30-49% of classrooms visited.
 - (3) Mark as a third priority those effective practices which are “*partially evident*” in 50-69% of the classrooms visited.
 - (4) Mark as a fourth priority those effective practices which are “*consistently evident*” in 70-100% of the classes visited.
- b. Second, develop systematic means for addressing the scale-up phase of **Appendix B: promoting “pockets of excellence;”** see **Reference Section R-3: “Promoting Effective Practices.”**
- c. Third, provide procedures for strengthening skills of all those responsible for implementing and sustaining practices identified in **Reference Section R-4: “Responsibilities for Sustaining PALSS,”** and **R-5: “Providing Procedures for Implementing Networking & Coaching Practices.”**

The NSDC’s definition of PD is “A comprehensive, sustained and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement.” What the NSDC deems critical is having educators “...learn through collaboration, benefiting from each other’s knowledge, insight, and experience so they are also more likely to take mutual responsibility for increasing the achievement of all students.”⁹

⁸ City, Elmore, Fiarman & Teitel. *Instructional Rounds in Education* (Cambridge, MA: Harvard Education Press, 2009)

⁹ National Staff Development Council. (Oxford, OH: www.nsd.org, 2009)

SESSION TOPIC: **USING CLASSROOM DATA FOR ADVANCING PROFESSIONAL DEVELOPMENT**

Date: _____

The primary purpose of staff development is to focus educators on the implementation of practices that result in increased student learning. The evaluation of your experiences which were provided to achieve that purpose will support the continuous improvement of future training efforts.

TO WHAT EXTENT DID THIS SESSION CONTRIBUTE TO YOUR LEARNING IN ORDER TO SUPPORT FUTURE LEARNING OF YOUR STUDENTS? (4=GREAT EXTENT TO 1=MINIMAL)

1. Content: What is to be learned	Score (4=Great Extent to 1= Minimal)			
Provided learning experiences to collaborate on the development of plans for systematically accomplishing the following: PLANNING how to use systematic classroom observation procedures as catalysts for implementing research-based effective educational practices DOING classroom visits using common criteria, calibrating data & providing feedback to the learning community STUDYING observation data using a consistent protocol to determine the extent of implementation of research-based teaching/learning practices ACTING to determine future professional development practices using data	4	3	2	1
	4	3	2	1
	4	3	2	1
	4	3	2	1
2. Process: How the learning occurs				
a. Provided sufficient opportunities to collect and calibrate observation data.	4	3	2	1
b. Provided sufficient time for interactive discussions and collaborative tasks to support the use of data-driven professional development planning.	4	3	2	1
3. Context: Where the learning will be applied with resources & relationships				
a. Provided resources and procedures for systematically building “learning communities” to guide continuous improvement of student learning.	4	3	2	1
b. Provided procedures for transferring skills to school/classroom practice.	4	3	2	1
4. Comments				
a. Describe at least one way you will use this information/learning in the upcoming month:				
b. Describe which components of this staff development have been the most useful and why?				
c. Describe ways to modify this staff development to better address your priorities:				
Additional Comments:				

*ADAPTED FROM: *TOOLS FOR GROWING NATIONAL DEVELOPMENT STANDARDS* (2001) WWW.NSDC.ORG/BOOKSTORE.HTM.ITEM#B129

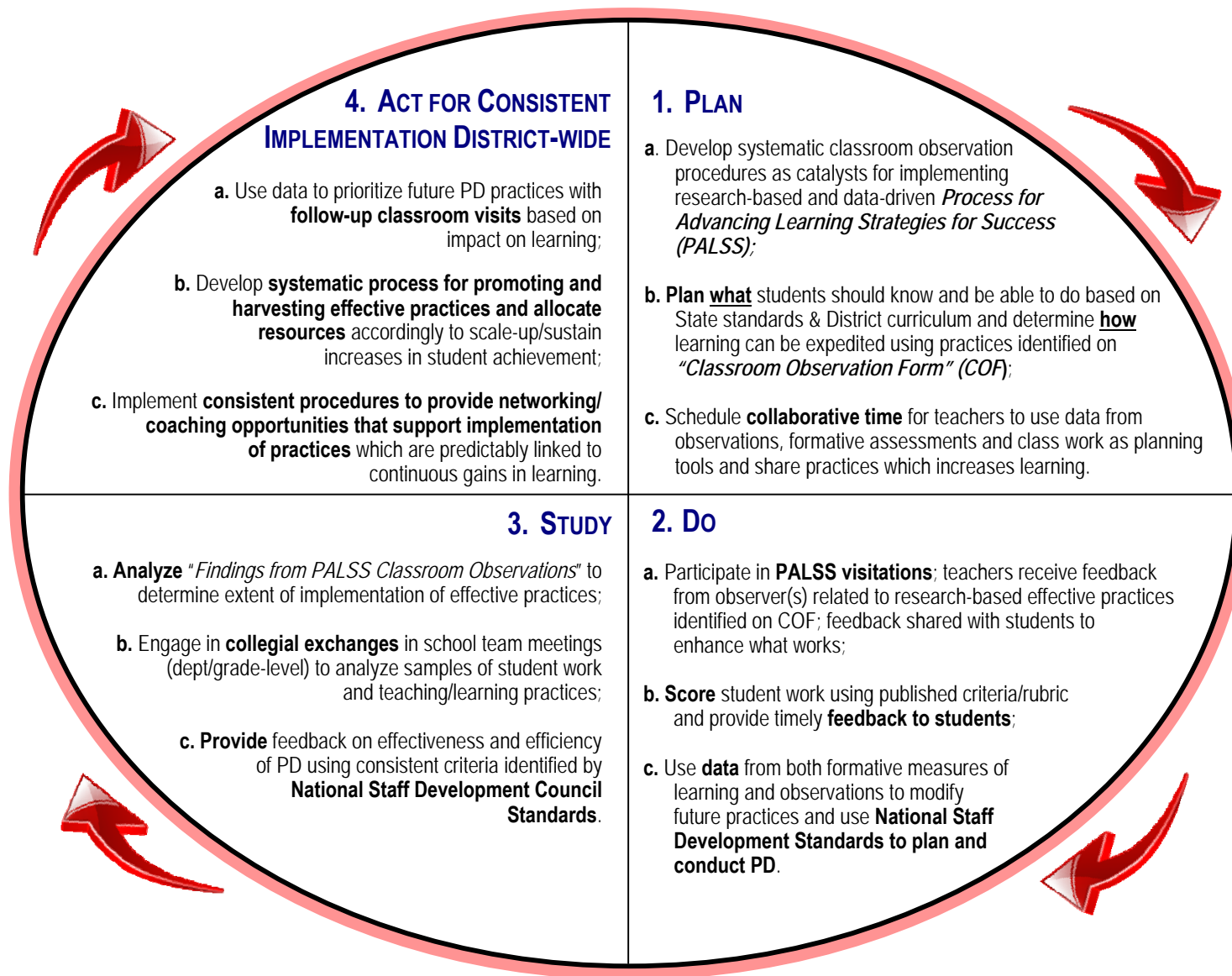
(OPTIONAL) NAME _____

LOCATION/ SCHOOL _____

©CROSS & JOFTUS, LLC EDUCATION STRATEGIES FOR SUCCESS

Continuous Improvement Process for Implementing Classroom Observations=Professional Development ©

Systemic support will be provided by the District to initiate and sustain implementation of a data-driven professional development (PD) program using the four phases of the "Continuous Improvement Process" adapted from W.E. Deming's "Total Quality Management Model". The improvement process includes the phases of "Plan", "Do", "Study", "Act" as specified below:



Classroom Observation Form

District: _____ School: _____ Date: _____ Time In: _____ Time Out: _____ Subject/Grade: _____ Teacher: _____

No. of Students: _____ Standard: _____ Observer: _____

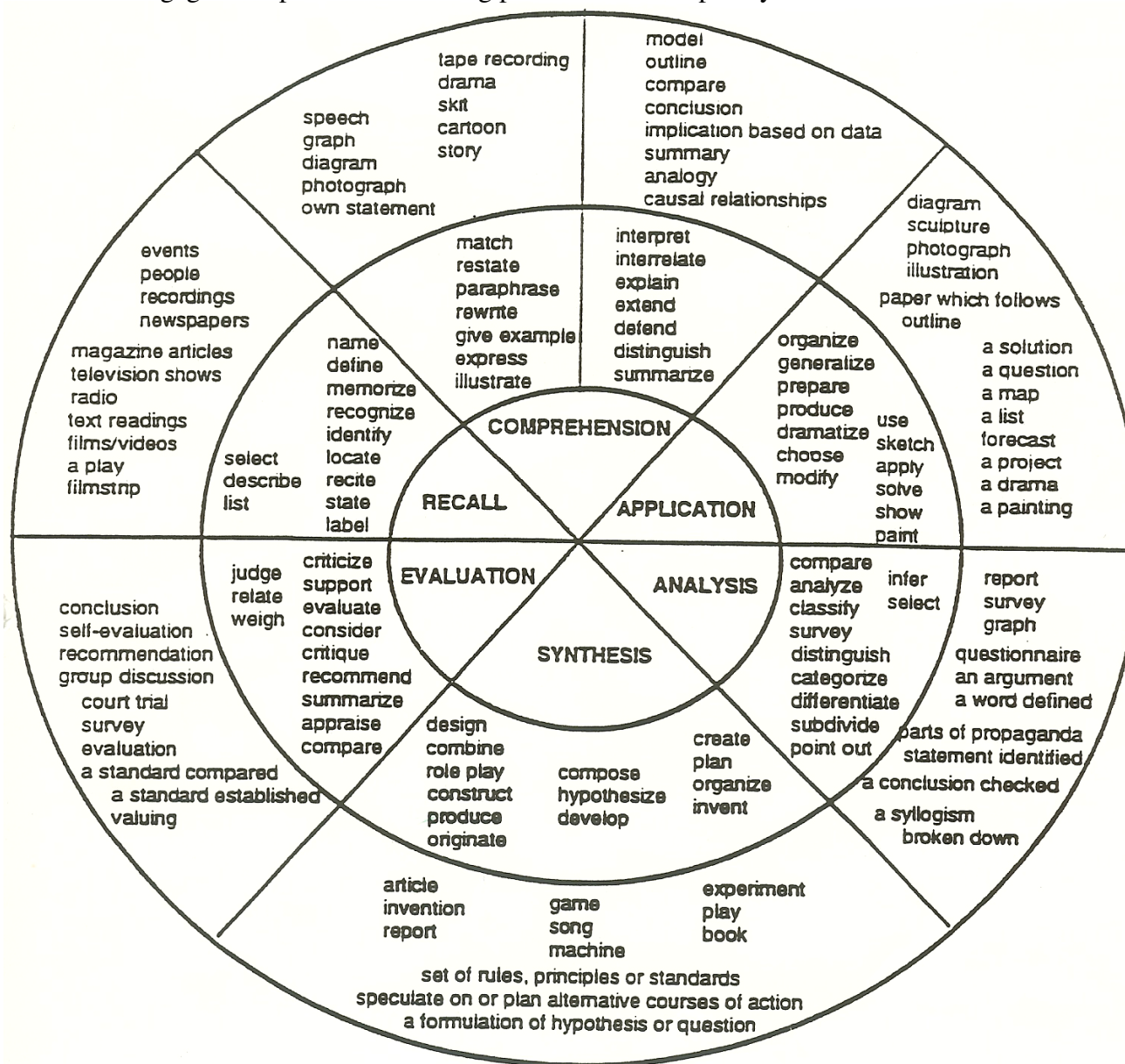
Objective/Task students demonstrate by end of lesson (link to thinking level) _____

THINKING LEVEL (Mark highest level): ☐ Knowledge (recall) ☐ Comprehension (interpret) ☐ Application (use) ☐ Analysis (examine) ☐ Synthesis (create) ☐ Evaluation (judge)

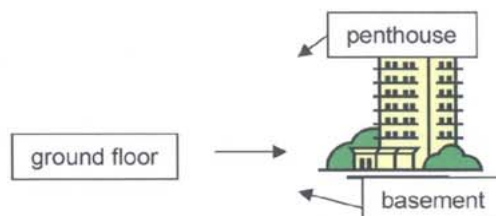
TEACHING PRACTICES	STUDENT LEARNING PRACTICES
<p>1. E=ENVIRONMENT/MANAGEMENT:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Orderly/Clean/Well-Managed <input type="checkbox"/> b. Safe/Conducive to learning <input type="checkbox"/> c. Evidence of student work is displayed <input type="checkbox"/> d. Technology <p>3. D=DESIGN/INSTRUCTIONAL PLANNING :</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Standards/skill-based lesson communicated <input type="checkbox"/> b. Explicit instruction/teacher input <input type="checkbox"/> c. Modeling/Demonstrated expected learning <input type="checkbox"/> d. Checking understanding to assess skills <input type="checkbox"/> e. Guided Practice under supervision <input type="checkbox"/> f. Independent practice/Homework <input type="checkbox"/> g. Evaluation of learning progress <p>5. S=STRATEGIES:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Adjust for multiple learning styles (circle all that apply: auditory/visual/kinesthetic) <input type="checkbox"/> b. Incorporate culturally responsive readings/perspectives/materials <input type="checkbox"/> c. Address diverse language needs <input type="checkbox"/> d. Target research-based practices that accelerate learning <ul style="list-style-type: none"> <input type="checkbox"/> (1) Identify similarities & differences <input type="checkbox"/> (2) Summarize & take notes <input type="checkbox"/> (3) Reinforce efforts & provide recognition <input type="checkbox"/> (4) Use homework & practice opportunities <input type="checkbox"/> (5) Represent knowledge using linguistic/non-linguistic forms of information <input type="checkbox"/> (6) Organize learning in groups; cooperative learning/pairs/small groups <input type="checkbox"/> (7) Set objectives & provide immediate/continuous feedback <input type="checkbox"/> (8) Generate & test hypotheses <input type="checkbox"/> (9) Use cues, questions & advance organizers 	<p>2. E=ENVIRONMENT/RESOURCES USED:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Textbooks <input type="checkbox"/> b. Supplemental materials (tools) <input type="checkbox"/> c. Manipulatives <input type="checkbox"/> d. Technology: _____ <input type="checkbox"/> e. Worksheets (circle types: multiple-choice, fill-in, open-ended) <p>4. D=DESIGN/PARTICIPATION:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Asks/answers questions <input type="checkbox"/> b. Engages actively in classwork (circle extent: 0-30%; 31-69%; 70-100%) <input type="checkbox"/> c. Demonstrates expected learning independently <input type="checkbox"/> d. Receives feedback on performance <input type="checkbox"/> e. Demonstrates self-evaluation of learning progress <p>6. S=STRATEGIES DEMONSTRATED:</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Demonstrates knowledge in multiple ways (circle all that apply): interpersonal, intrapersonal, verbal-linguistic, logistical-mathematical, visual-spatial, bodily-kinesthetic, musical- rhythmic) <input type="checkbox"/> b. Experiences differentiated instruction with modified content, processes/activities and/or products/assignments <p>7. COMMENTS TO TEACHER:</p>

DESCRIPTORS OF COGNITIVE/THINKING LEVELS*

Each pie shape represents one level of thinking in Bloom's cognitive domain as specified in the core/inner circle. The outer ring contains examples of "culminating tasks" students could be expected to produce. The second ring contains examples of "instructional activities" students could engage in as part of the learning process. * Developed by the Council for Basic Education



A Three Story Intellect!



BLOOM'S TAXONOMY and Costa's Levels of Questioning

The Student will...

Knowledge (Remembering)	Comprehension (Understanding)	Application (Applying)	Analysis (Analyzing)	Synthesis (Creating)	Evaluation (Evaluating)
Learn specific facts, ideas, vocabulary; remembering/recalling information or specific facts.	Ability to grasp the meaning of material; communicate knowledge; understanding information without relating it to other material.	Ability to use learned material in new and concrete situations; use learned knowledge and interpret previous situations.	Ability to break down material into its component parts and perceive interrelationships.	Ability to put parts together to form a new whole; use elements in new patterns and relationships.	Ability to judge the value of material (statement, novel, poem, report, etc.) for a given purpose; judgment is based on given criteria.
Introduction of knowledge Level One—the basement		Practice knowledge learned Level Two—the ground floor		Demonstrates mastery of knowledge learned Level Three—the penthouse	
<i>By doing the following...</i>		<i>By doing the following...</i>		<i>By doing the following...</i>	
collect, copy, define, describe, examine, find, group, identify, indicate, label, list, locate, match, name, omit, observe, point, provide, quote, read, recall, recite, recognize, repeat, reproduce, say, select, sort, spell, state, tabulate, tell, touch, underline, who, when, where, what	alter, associate, calculate, categorize, change, communicate, convert, distinguish, expand, explain, inform, name alternatives, outline, paraphrase, rearrange, reconstruct, relate, restate (own words), summarize, tell the meaning of, translate, understand, verbalize, write	acquire, adopt, apply, assemble, capitalize, construct, consume, demonstrate, develop, discuss, experiment, formulate, manipulate, organize, relate, report, search, show, solve novel problems, tell consequences, try, use, utilize	analyze, arrange, break down, categorize, classify, compare, contrast, deduce, determine, diagram, differentiate, discuss causes, dissect, distinguish, give reasons, order, separate, sequence, survey, take apart, test for, why	alter, build, combine, compose, construct, create, develop, estimate, form a new..., generate, hypothesize, imagine, improve, infer, invent, modify, plan, predict, produce, propose, reorganize, rewrite, revise, simplify, synthesize	appraise, argue, assess, challenge, choose, conclude, criticize, critique, debate, decide, defend, discriminate, discuss, document, draw conclusions, editorialize, evaluate, grade, interpret, judge, justify, prioritize, rank, rate, recommend, reject, support, validate, weigh

Knowledge—Level 1A (Remembering)	Comprehension—Level 1B (Understanding)	Application—Level 2A (Applying)	Analysis—Level 2B (Analyzing)	Synthesis—Level 3A (Creating)	Evaluation—Level 3B (Evaluating)
<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Observation and recall of information • Knowledge of dates, events, places • Knowledge of major ideas • Master of subject matter 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Understanding information • Grasp meaning • Translate knowledge into new context • Interpret facts, compare, contrast • Order, group, infer causes • Predict consequences 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Use information • Use methods, concepts, theories in new situations • Solve problems using required skills or knowledge 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Seeing patterns • Organization of parts • Recognition of hidden meanings • Identification of components 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Use old ideas to create new ones • Generalize from given facts • Relate knowledge from several areas • Predict, draw conclusions 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Compare and discriminate between ideas • Assess value of theories, presentations • Make choices based on reasoned argument
<p>What is...? How is...? Where is...? When did ____ happen? How did _____? Why did...? How would you describe...? When did...? Can you recall...? How would you show...? Can you select...? Who were the main...? Can you list three...? Which one...? Who was...?</p>	<p>How would you classify the type of...? How would you compare/contrast...? Will you state or interpret in your own words...? How would you rephrase the meaning...? What facts or ideas show...? What is the main idea of...? Which statements support...? Can you explain what is happening...what is meant...? What can you say about...? Which is the best answer...? How would you summarize...?</p>	<p>How would you use...? What examples can you find to...? How would you solve _____ using what you have learned...? How would you organize _____ to show...? How would you show your understanding...? What approach would you use to...? How would you apply what you learned to develop...? What other way would you plan to...? What would result if...? Can you make use of the facts to...? What elements would you choose to change...? What facts would you select to show...? What questions would you ask in an interview with...?</p>	<p>What are the parts of...? How is _____ related to...? Why do you think...? What is the theme...? What motive is there...? Can you list the parts...? What inference can you make...? What conclusions can you draw...? How would you classify...? How would you categorize...? Can you identify the different parts...? What evidence can you find...? What is the relationship between...? Can you make a distinction between...? What is the function of...? What ideas justify...? How would you estimate the results for...? What facts can you compile...? Can you construct a model that would change...? Can you think of an original way for the...?</p>	<p>Do you agree with the actions...? with the outcomes...? What is your opinion of...? How would you prove...? Disprove...? Can you assess the value or importance of...? Would it be better if...? Why did they (the character) choose...? What would you recommend...? How would you rate the...? What would you cite to defend the actions...? How would you evaluate...? How could you determine...? What choice would you have?</p>	<p>Do you agree with the actions...? With the outcomes...? What is your opinion of...? How would you prove...? Disprove...? Can you assess the value or importance of...? Would it be better if...? Why did they (the character) choose...? What would you recommend...? How would you evaluate...? How could you determine...? What choice would you have made...? What would you select...? How would you prioritize...? What judgment would you make about...? Based on what you know, how would you explain...? What information would you use to support the view...? How would you justify...? What data was used to make the conclusion...? Why was it better that...? How would you prioritize the facts...? How would you compare the ideas...?</p>

DEFINITIONS OF RESEARCH-BASED EDUCATIONAL PRACTICES

APPENDIX F

PRACTICES	DEFINITIONS
1. E=ENVIRONMENT/MANAGEMENT:	(Teaching)
a. Orderly/Clean/Well-Managed	Provide classroom rituals and routines which promote student actions that lead to a learning focused environment
b. Safe/Conducive to learning	Provide psychological and physical space to enhance learning with effective & efficient placement of equipment, furniture and student possessions.
c. Evidence of student work is displayed	Provide models of recent work posted either in the classroom or in the hall outside the classroom. Ideally rubrics accompany posted work indicating criteria used for evaluation.
d. Technology	Provide technology for instructional purposes e.g. powerpoint, smartboard, graphing calculators, ELMO, etc.
2. E=ENVIRONMENT/RESOURCES USED:	(Learning)
a. Textbooks	Use texts & workbooks adopted by the district for student use
b. Supplemental materials	Use, graphic organizers, novels, charts, white boards, journals, etc.
c. Manipulatives	Use blocks, tools, etc. to support kinesthetic learning.
d. Technology/ Assistive Technology:	Use computers, calculators, CPS, etc. <i>Assistive Technology is used to increase maintain, or improve the functional capabilities of a child with a disability; see Reference-6.</i>
e. Worksheets (circle types: multiple-choice, fill-in, open-ended)	Use printed materials/text adopted handouts, supplemental worksheets which either require ONE answer OR a variety of answers
3. D=DESIGN/INSTRUCTIONAL PLANNING :	(Teaching)
a. Standards/skill-based lesson communicated	Communicate explicit skill which students are to know & be able to do either using verbal or written communication
b. Explicit instruction/teacher input	Provide new information vs. modified instruction that may occur during checking for understanding or guided practice
c. Modeling/Demonstrated expected learning	Provide examples of process or product (TEACHER DOES IT)
d. Checking understanding to assess skills	Provides opportunities to determine if the student possesses the skills to perform the task and understands what they are to do (WHOLE CLASS DOES IT TOGETHER)
e. Guided Practice under supervision	Provide practice of the skill or process as a group while the teacher supervises (STUDENTS DO IT TOGETHER)
f. Independent practice/Homework	Provide practice of the skill on their own. Two or more students may be working together. No teacher guidance is provided. (STUDENTS DO IT ALONE)

g. Evaluation of learning progress	Provide evaluation of the individual student's performance of the learning objective. If the objective is the student will be able to add double digits together; how well did the student <i>accomplish that objective?</i> e.g., students taking a quiz or a test.
4. D=DESIGN/PARTICIPATION: (Learning)	
a. Asks/answers questions	Demonstrates student understanding by asking/answering questions about the learning objective or task
b. Engages actively in class work (circle extent: 0-30%; 31-69%; 70-100%)	Demonstrates extent of student engagement in the learning task.
c. Demonstrates expected learning independently	Demonstrates individual student learning-independent of teacher; unsupervised learning. At times two students may be working together, but each has a product to complete.
d. Receives feedback on performance	Demonstrates student understanding of feedback specific to the task to correct/modify learning as it is developing. Examples might include: "Good alignment of numbers in the algorithm;" "The conversation in your group is right on target;" "What does your fact chart say about the use of an adjective?"; "I see you are struggling on this one, go back and read your directions."
e. Demonstrates self-evaluation of learning progress	Demonstrates self reflection on what the student has learned and how they can use that self-analysis to inform future learning. Examples may include: specific teacher direction for students to think about their learning, explain why or how they completed a task or explain what actions they would take to improve their work.
5. S=STRATEGIES: (Teaching)	
a. Adjust for multiple learning styles (circle all that apply: auditory/visual/kinesthetic)	Provide instruction that emphasizes students receiving information by hearing/listening, seeing, or physically manipulating learning resources
b. Incorporate culturally responsive readings/perspectives/materials	Provide respect for ALL cultures with equitable opportunities for learning guided by principles of differentiation related to respectful tasks, flexible grouping and ongoing assessment and adjustment (See R-2: Descriptors of Culturally Responsive/Diverse Lang. Needs)
c. Address diverse language needs	Provide models, access to student's prior knowledge; cooperative learning activities, and shorter and simpler sentences at a slower rate with high frequency vocabulary. and elimination of idiomatic expressions
d. Target research-based practices that accelerate learning	Provide forms of comparing, classifying, and creating metaphors and analogies
(1). Identify similarities & differences 45%+	Provide summarizing activities by engaging students in deleting information, substituting information, and keeping information in a condensed form

(2) Summarize & take notes 34%+	Provide summarizing activities by engaging students in deleting information, substituting information, and keeping information in a condensed form
(3) Reinforce efforts & provide recognition 29%+	Provide reward or praise for effort and accomplishments at targeted levels of performance
(4) Use homework & practice 28%+	Provide tasks that prepare for learning or elaboration regarding what was learned
(5) Represent knowledge using linguistic/non-linguistic forms of information 27%+	Provide knowledge to be stored in two forms: a. Linguistic Form; b. Imagery Form or non-linguistic using graphics, graphic organizers, pictures, models, and engagement in kinesthetic
(6) Organize learning in groups; cooperative learning/pairs/small groups 27%+	Provide cooperative learning with: positive interdependence, face to face supportive interaction, individual/group accountability, interpersonal/small group skills, and group processing
(7) Set objectives & provide immediate/continuous feedback 23%+	Provide learning focus and feedback that is corrective, timely, specific to criterion, and ensures self-monitoring for self-evaluation
(8) Generate & test hypotheses 23%+	Provide either for deductive thinking (using rules to predict) OR inductive thinking (discover principle and draw conclusions)
(9) Use cues, questions & advance Organizers 22%+	Provide hints or higher level questions to produce help for students to use what they already know about a topic. Provide four types of “Advance Organizers”: 1) expository -description of new content through reading/discussion; 2) narrative - presentation of information in story format; 3) skimming -quick review of highlights; 4) illustrating -pictorial representation such as a graphic organizer.
6. S=STRATEGIES DEMONSTRATED: <i>(Learning)</i>	
a. Demonstrates knowledge in multiple ways: interpersonal, intrapersonal, verbal/linguistic, logistical/mathematical, visual/spatial, bodily/ kinesthetic, musical/rhythmic)	See Appendix H: DEMONSTRATING KNOWLEDGE IN MULTIPLE WAYS
b. Experiences differentiated instruction with modified content, processes/activities and/or products/assignments	See Appendix I: IMPLEMENTING DIFFERENTIATED INSTRUCTION

Strategies Used to:		Examples of the Strategies:
Adjust for multiple learning styles		Use of auditory (language, music), visual (colors, visuals), or kinesthetic (manipulatives)
Incorporate culturally responsive readings/perspectives		Use of multicultural information, resources and materials in all subjects; see Reference-8
Address diverse language needs		Use of shorter and simpler sentences in reading passages.
*Identify similarities and differences	45%+	Venn diagrams, T-Chart, metaphors, analogies, or sorting mats
*Summarize and take notes	34%+	Journals, fishbone note-taking, Cornell notes, and verbal or written summary,
*Reinforce efforts and provide recognition	29%+	Celebration for effort or progress toward a learning goal, posting student work, or teacher/student conferencing.
*Use homework and practice opportunities	28%+	Providing specific feedback on homework or assigning homework to practice a specific skill
*Rep. knowledge using linguistic/non-linguistic forms of information	27%+	Mental pictures, concept mapping, graphic organizers, webs, or drawing pictures.
*Organize learning in groups	27%+	Partner work or group projects
*Set objectives and provide immediate/continuous feedback	23%+	Personalized goal setting at the beginning of a unit, feedback on learning goals, or learning logs.
*Generate and test hypotheses	23%+	Problem-solving, justifying predictions, science inquires, or pictures walks
*Use cues, questions and advance organizers	22%+	Higher Order Thinking questions ("Application" and above) activate prior knowledge, KWL charts, word sorts, or outlines.

* From Marzano, Pickering & Pollock (2001). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development. **The percentile gains are listed beside each of the instructional practices.**

Verbal/Linguistic	Examples
This intelligence is related to words and language – written and spoken by oneself or others	Read/write/tell a story, a play, a poem, list, letter, speech, advertisement, joke, crossword puzzle, comic, journal entry, debate, or play word games.
Logical/Mathematical	
This intelligence deals with inductive & deductive thinking/reasoning, numbers and recognition of abstract patterns.	Problem-solving, fixing and inventing things, finding patterns, understanding numerical relationships, ordering objects, predicting outcomes, creating a timeline or outline, and using a graphic organizer or Venn diagram.
Visual/Spatial	
This intelligence relies on the sense of sight and being able to visualize an object and to create mental images and pictures.	Visualize or draw a picture from a story or event, illustrate the definition of a word, mind-mapping, form a mental image, create a collage or poster, or map reading.
Bodily/Kinesthetic	
This intelligence is related to physical movement and the knowing/wisdom of the body; including the brain's motor cortex controlling bodily motions.	Role play, create facial and body gestures associated with emotion, act out, clap or stomp to count, or create a human graph.
Musical/ Rhythmic	
This intelligence is based on the sensitivity to rhythm and beats and recognition of tonal patterns, to include environmental sounds.	Clap word syllables, choral response, sing or create a song or rap, listen to music, and dance
Interpersonal	
This intelligence operates primarily through person-to-person relationships and communication.	Collaboration, negotiating, verbal and non-verbal communication, joint story –telling, reflective listening
Intrapersonal	
This intelligence relates to inner states of being, self-reflection, metacognition, and awareness of spiritual realities.	Questioning , problem-solving, higher-order thinking, process thinking, journal writing, complete the ending of a story, interpret a picture, write from your perspective, or create a thinking log

Content	Process	Product
Defines WHAT a student should know, understand or be able to do as a result of the study.	Defines HOW the student will access the content to make sense of the knowledge, understanding and skill specified by the curriculum.	Defines what the student will PRODUCE to provide evidence of knowledge, understanding, and skill throughout the period of learning.
Teacher Action		
Focus on standard of what the student will learn and modify how the student gains access to the content.	Focus activities on practices that expedite students obtaining the key knowledge, understanding, and skills to interact with the curriculum in order to demonstrate learning.	Call on students to produce a demonstration of how they have owned knowledge, understanding, and skill of the learning.
Differentiation through:		
<p>Multiple texts and supplementary resources with varied reading levels</p> <p>Varied computer programs</p> <p>Varied audio-visuals and/or audiotapes of key passages from the text so the student can listen to the information</p> <p>Interests centers based upon student interests to drive reading and vocabulary instruction</p> <p>Determine the content that all students need to learn, some students need to learn, and few students need to learn.</p>	<p>Tiered assignments</p> <p>Learning centers</p> <p>Multiple Intelligences assignments</p> <p>Graphic Organizers</p> <p>Simulation</p> <p>Group investigation</p> <p>Marzano's instructional strategies</p> <p>Learning Logs</p> <p>Development of routines</p>	<p>Tiered product assignments (Not to be confused with MTSS tiering)</p> <p>Multiple Intelligences- based products</p> <p>Community-based products</p> <p>Negotiated criteria</p> <p>Graduated rubrics</p> <p>Group investigation</p> <p>Independent Study</p> <p>Bloom's Taxonomy from knowledge to analysis</p>

Figure A.1
A Planning Model for Academic Diversity and Talent Development

Flexible Grouping

Content	Process	Product
Concept and generalization-based High relevance Coherent Transferable Powerful Authentic	Concept and generalization driven Focused High level Purposeful Balancing critical and creative thought Promoting cognition and metacognition	Concept or issue centered Skills of planning taught Skills of production taught Requires application of all key skills and understandings Uses skills of the discipline Real problems and audiences Multiple modes of expression
<u>Differentiation through</u> Multiple texts and supplementary print resources Varied computer programs Varied audio-visuals Varied support mechanisms Varied time allotments Interest centers Contracts Compacting Triarchic-based orientation Complex instruction Group investigation	<u>Differentiation through</u> Tiered assignments Learning centers Triarchic model assignments Multiple intelligences assignments Graphic organizers Simulation Learning logs Concept attainment Concept development Syntectics Complex instruction Group investigation	<u>Differentiation through</u> Tiered product assignments Independent study Community-based products Negotiated criteria Graduated rubrics Triarchic-based orientations Multiple intelligences-based orientations Complex instruction Group investigation

Active Orientation

Escalating Expectation

Source: Tomlinson, C. (1999). *The Differentiated Classroom: Responding to the Needs of All Learners* (pg. 121). Alexandria, VA: Association for Supervision and Curriculum Development.

To ensure congruence of data collected during classroom observations, if the components listed below are observed on the PALSS Observation Form under the “Learning Practices” section then the corresponding “Teaching Practices” section should also be marked.

TEACHING PRACTICES	LEARNING PRACTICES
COGNITIVE//THINKING LEVEL -The total must be 100% for each level of schooling	
1. ENVIRONMENT/RESOURCES	2. ENVIRONMENT/RESOURCES Choices need to align with 2. C. Manipulatives and 6a (6) Bodily-/kinesthetic
d. Checking understanding	Choices: 4a: Asks/answers questions 5d (item 3: Reinforce efforts/provide recognition)
e. Guided Practice	Choices: 4b: Engages actively in class work 4d: Receives feedback on performance 5d: (item 4: Use homework/practice opportunities)
f. Independent Practice	Choices: 4c: Demonstrates learning independently 5d: (item 4: Use homework/practice opportunities)
g. Evaluation	Choices: 4e: Demonstrates self-evaluation of learning progress 6a: intrapersonal
3. DESIGN	4. DESIGN/PARTICIPATION Cannot exceed 100% for all three levels of schooling.
5. STRATEGIES a. - Auditory Presentation	6. STRATEGIES DEMONSTRATED a.- Auditory: match to Verbal-Linguistic or Musical-Rhythmic
- Visual Presentation	- Visual: match to Visual-Spatial or Logistical-Mathematical;(Choices could be: 2a: Textbooks or 2e: Worksheets)
- Kinesthetic Presentation	- Kinesthetic: match to Bodily-Kinesthetic; (Choices could be 2c: Manipulatives or 2d: Technology)
d. Research-Based Practices	
(3) Reinforce efforts & recognition	4d. Receives feedback
(6) Organize in groups	6a. Interpersonal
(7) Receives feedback	4d. Receives feedback

LEARNING OBSERVATION FEEDBACK FORM FOR PALSS: PROCESS FOR ADVANCING LEARNING STRATEGIES FOR SUCCESS

TO: _____ Room: _____ DATE: _____

FROM: Visitation Team Member _____

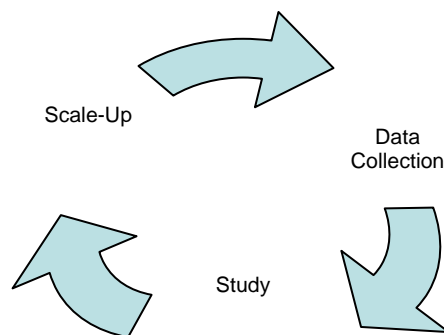
SUBJECT: Implementation of Learning Strategies for Success

Thank you for participating in PALSS, a systematic process for obtaining information about what teaching and learning practices are currently being used in classroom. As a result, working in collaboration with your school and district leadership, priority status will be given to future professional development (PD) practices which are predictably linked to expediting improved achievement. The cyclical process used in PALSS emphasizes the following actions within a professional learning culture:

1. **Data Collection:** Conduct classroom visits using implementation of research-based effective practices as the common criteria for providing feedback to learning community
2. **Data Study:** Analyze teaching/learning data to determine extent of implementation and impact on student learning
3. **Scale-Up:** Use collective & systemic levels of collegial support to increase number and frequency of practices that “work”

During today’s visit to your classroom, strategies for advancing learning that were observed included:

Process for Advancing Learning



***PALSS: PROCESS FOR
ADVANCING LEARNING STRATEGIES FOR SUCCESS®***

Sample “Comments” Related to Classroom Observations

1. Students work samples were displayed with the rubric used for evaluation.
2. Students were reminded of the lesson focus as the standard was visibly displayed and referenced at the beginning of the lesson and the end when progress toward the standard was summarized.
3. Students were asked to develop relevant questions for their peers to answer as a “check of understanding.”
4. Students were provided information using all three learning styles: auditory, visual and kinesthetic.
5. Student differences were provided for by having students work on projects of varying degrees of difficulty and complexity.
6. Students were actively engaged/involved with the lesson.
7. Students received feedback on their performance and demonstrated self-evaluation/reflection.
8. Students demonstrated their knowledge in multiple ways (e.g., interpersonal, intrapersonal, verbal-linguistic, logistical-mathematical, visual-spatial, bodily-kinesthetic, or musical-rhythmic).
9. Students used their knowledge to perform higher level thinking skills based upon the questions you asked or the assignment you provided.
10. Students’ critical thinking skills were promoted when you asked them to elaborate or explain comments.
11. Students used a variety of instructional materials/technology to further learning.
12. _____

13. _____

14. _____

DIRECTIONS FOR COMPILING DATA FROM PALSS OBSERVATIONS

The following process is to be used when compiling observation data collected during PALSS classroom visitations:

1. Each team is to reach consensus regarding the “Teaching” and “Learning” practices observed in EACH classroom such that there is a SINGLE agreed upon observation for EACH classroom determined by the entire observation team.
2. When there is agreement that a “Teaching” or “Learning” practice occurred , a recorder from each team is to enter the agreed upon observation data from each classroom onto the “MASTER COF” and attach the sheets from the other team members to the MASTER.
3. At the top of the **Appendix O: “Template for PALSS Data”** record the total number of classrooms visited for each level of schooling (e.g., elementary, middle, and senior high) and mark the number of Special Education classes visited in the last column.
4. When the final **data for each class are entered electronically and saved in the system**, it will automatically populate and compute percentages for each level of schooling (e.g., elementary schools, middle schools, and senior high schools) and populate suggested Professional Development Recommendations.
5. Analyze congruence of data by using **Appendix K “Alignment Between Teaching and Learning Practices”** to cross-reference entries and make adjustments accordingly.
6. As a team, analyze the data related to the percentage of practices demonstrated and review the statements under the “**Professional Development Recommendations.**” Using the process described in the “Scaling-Up Phase” on p. 8 of this *Guide* identify the first priority of professional development practices.

Summary of PALSS Observation					
Date:					
		EL	MS	HS	SP ED
	Number of Classrooms:				
TEACHING PRACTICES					
Cognitive Level					
	Knowledge				
	Comprehension				
	Application				
	Analysis				
	Synthesis				
	Evaluation				
1. Environment					
	a. Orderly/Clean/Well-Managed				
	b. Safe/Conducive to Learning				
	c. Evidence of Learning/Displays Student Work				
	d. Technology				
3. Design					
	a. Standards-based lesson				
	b. Explicit Instruction/Teacher Input				
	c. Modeling				
	d. Checking Understanding				
	e. Guided Practice				
	f. Independent Practice				
	g. Evaluation of Progress				
5. Strategies					
	a. Adjust for multiple learning styles:				
	auditory				
	visual				
	kinesthetic				
	b. Incorporate culturally responsive readings/perspectives				
	c. Address diverse language needs				
	d. Research-based Practices:				
	(1) Identify similarities & differences				
	(2) Summarize & take notes				
	(3) Reinforce efforts & provide recognition				
	(4) Use homework & practice opportunities				
	(5) Represent knowledge linguistic/non-linguistic				
	(6) Organize learning in groups				
	(7) Set objectives & provide immediate/continuous feedback				
	(8) Generate & test hypotheses				
	(9) Use cues, questions & advance organizers				

LEARNING PRACTICES					
2. Environment/Resources					
a. Textbooks					
b. Supplemental materials					
c. Manipulatives					
d. Technology					
e. Worksheets:					
Multiple-choice					
Fill-in					
Open-ended					
4. Design Participation					
a. Asks/answers questions					
b. Engages actively in classroom:					
0 - 30%					
31 - 69%					
70 - 100%					
c. Demonstrates expected learning independently					
d. Receives feedback on performance					
e. Demonstrates reflection (meta-cognition)					
6. Strategies Demonstrated					
a. Demonstrates knowledge in multiple ways:					
(1) interpersonal					
(2) intrapersonal					
(3) verbal-linguistic					
(4) logistical-mathematical					
(5) visual-spatial					
(6) bodily-kinesthetic					
(7) musical-rhythmic					
b. Experiences differentiated presentation of information					

Designs for Instructional Planning

The Design/Instructional Planning section included on the PALSS Observation Form names components of direct instruction (di). The selection of direct instruction model components in the PALSS process is supported by the research of Robert Marzano citing model effectiveness for increasing student learning outcomes for all students.¹⁰ Other research supports both direct instruction and strategy instruction for the teaching of mathematics to regular education students and students with disabilities¹¹ and the teaching of reading/language arts to all students¹².

Your district may be encouraging the use of other instructional design models in which the components of effective instructional design may look different (e.g., constructivism, spiral or inquiry based models). As the PALSS observation data is reviewed by district staff, the instructional design model that has been selected by the district should be considered when analyzing the data to determine professional development needs related to Design/Instructional Planning.

¹⁰ Marzano, Pickering, & Pollock, 2001: *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Association for Supervision and Curriculum Development.

¹¹ Maccini, P., & Gagnon, J. C. (2000). Best practices for teaching mathematics to secondary students with special needs. *Focus on Exceptional Children*, 32, 1–22.

¹² Gunter, Estes, Schwab, *Instruction, a Models Approach*, 4th Edition, 2003, Allyn and Bacon

DESCRIPTORS OF CULTURALLY RESPONSIVE READINGS/PERSPECTIVES AND DIVERSE LANGUAGE NEEDS

Strategies Used to: Incorporate culturally responsive readings/perspectives and diverse language needs		
	Acknowledgement of cultural heritages	Provides classroom environments which reflect multiple ethnic perspectives and literary genre; math instruction that reflects every-day life concepts; and activities that reflect a variety of sensory opportunities (visual, auditory, tactile)
	Bridges meaningfulness between home and school experiences as well as academic abstractions and lived socio-cultural realities (cultural capital)	Provide respect for ALL cultures with equitable opportunities for learning guided by principles of differentiation related to respectful tasks, flexible grouping and ongoing assessment and adjustment, including use of cultural referents to impart knowledge, skills, and attitudes. Maintains cultural identity and heritage in materials used
	Address diverse language needs	Provide models, scaffolds, access to student's prior knowledge; provide cooperative learning activities; and differentiate instruction using visuals, pantomimes, shorter and simpler sentences at a slower rate with high frequency vocabulary and elimination of idiomatic expressions (<u>Classroom Instruction that Works with English Language Learners</u> , p. 2. Hill & Flynn, 2006)
	Wide array of instructional strategies connected to different learning styles	Provide curriculum content, learning context, classroom climate, student-teacher relationships, instructional techniques and performance assessments that elad to academic competence, self-efficacy, and initiative so that students believe they can succeed and persevere.
	Teaches students to know and praise their own and each others' cultural heritages	Reflected through a student-centered program for multicultural democracy in school and society with a focus on active individual growth, cooperation, and social processes for attribution retraining, positive self-efficacy and celebration of individual and collective accomplishments.
	Reinforce efforts and provide recognition	Provide reward or praise for effort and accomplishments at targeted levels of performance
	Use of multicultural information, resources and materials in all the subjects and skills routinely taught in schools.	Provide tasks that reflect the acknowledgement of strengths and accomplishments of all students; uses verbal creativity, story-telling, small group activities, cooperative learning as transformative opportunities for many cultures.

*Descriptors from Culturally Responsive Teaching: Theory, Research & Practice. (Gay, G. (2000) and Affirming Diversity: The Sociopolitical Context of Multicultural Education. Nieto, S. (2004)

PROMOTING EFFECTIVE PRACTICES

In *Leading for Results*, Dennis Sparks proposes that “Educational communities benefit when they can identify solutions within the system since credibility is embedded within the work.” Sparks references Jerry Sternin’s research that distinguishes between “best practices” which could occur outside the system and “positive deviants” which occur within the system. Positive deviants are “...practices which produce solutions to problems others in the group who have access to the same resources have not been able to solve within the community.”

Use each of the following six steps in order to systematically scale-up the implementation of at least one effective practice using the “positive deviant” approach:

Sparks, Dennis (2005). *Leading for Results: Transforming Teaching, Learning, & Relationships in Schools*. Thousand Oaks, CA: Corwin Press.

POSITIVE DEVIANT APPROACH	PROMOTION OF PRACTICES
1. DEFINE the problem (learning challenge) & then describe what success(learning asset) looks like	1.
2. DETERMINE those who have achieved success within the system	2.
3. DISCOVER their uncommon demonstrable successful behaviors & practices	3.
4. DESIGN plan to provide resources & support which enables other members to practice demonstrated success	4.
5. DISCERN metric to measure the effectiveness of the resources & supports	5.
6. DISSEMINATE successful practices to a wider audience; amplify, publicize & promote	6.

RESPONSIBILITIES FOR IMPLEMENTING & SUSTAINING *P.A.L.S.S.*

Reference R-4

PALSS (Process for Advancing Learning Strategies for Success)©

The primary purpose of *PALSS* is to provide a systematic, collaborative, & data-driven process for informing professional development practices which consistently result in increased student learning. All members of the learning community share responsibility for this accomplishment.

	STUDENTS	TEACHERS	SCHOOL LEADERSHIP	DISTRICT/CMO/EMO LEADERSHIP
PLANNING	Identify effective student learning research-based practices which accelerate the pace of acquiring knowledge	Participate in <i>PALSS</i> training to ensure a common understanding of the research-based practices students are to be provided district-wide in order to predictably accelerate learning; collaboratively develop in professional learning communities strategies for implementing those practices	Participate in <i>PALSS</i> training to ensure the collection of classroom observation data supports a consistent process for measuring the extent professional development (PD) is implemented and for informing future PD practices	Design and conduct <i>PALSS</i> training sessions to clarify the District's systematic process for improving learning using frequent classroom visits to assess the extent to which research-based effective teaching practices are being implemented & to inform future PD practices
DOING	Analyze student achievement data from summative/periodic assessments, classroom assignments and tests which tell what students know & what they need to know	Demonstrate practices attributed to increasing learning gains & review student performance data; use individual feedback comments from classroom visits to inform future teaching practices	Conduct classroom observations to both collect & communicate data to teachers which indicates the extent of implementation of practices that accelerate learning	Schedule time to participate in classroom visits at each school site; model use of sample feedback statements given to teachers following each visit; compile data to assess impact of practices on improved student performance
STUDYING	Participate in self-evaluation of performance on assessments and assignments to determine what practices are needed in order to increase both WHAT students know & HOW they can learn it	Conduct analysis of classroom observation data & student learning data in Professional Learning Communities (PLCs); collaboratively "swap practices" that resulted in accelerated learning gains; make future plans of what to teach and how to expedite future learning	Use data collected during classroom visits to determine future PD priorities in order to increase the expansion of those practices that result in accelerated learning gains in greater numbers of classrooms	Provide resources & PD to support demonstration & practice sessions for teachers of the research-based practices Evaluate training continuously based on National Staff Development Standards & assess feedback to determine follow-up
ACTING	Engage students in "tracking their own progress" using graphic displays for 32 percentile point gains (see "When Students Track their Progress" <i>Educational Leadership</i> , January 2010, pgs 86-87 www.marzanoresearch.com)	Participate in collegial exchange visits to other teachers' classrooms to see impact of demonstrations of effective practices and contribute to debriefing sessions to promote collective efforts	Develop systematic means for harvesting effective practices for wider dissemination & replication; allocate resources accordingly	Use feedback from school-based representatives to continuously adapt training in order to address identified priority PD practices which are needed to expedite future gains in student learning; promote effective practices

PROCEDURES FOR IMPLEMENTING NETWORKING & COACHING OPPORTUNITIES

According to the research summarized by Judith Warren-Little in “Teachers As Colleagues”, “When teachers engage regularly in authentic joint work focused on explicit common learning goals, then collaboration pays off richly in the form of higher quality solutions to instructional problems, increased teacher confidence, and not surprisingly remarkable gains in achievement.”

1. **FACE-TO-FACE COLLABORATION/NETWORKING:** Identify practices which can be implemented with consistency to provide:
 - a. Coaching support for individual teachers
 - b. Collaborative opportunities for teachers to collectively plan lessons, review student learning data and samples of student work, as well as exchange ideas about resources and strategies to improve future learning results

Little (1987). “Teachers as Colleagues” in Richardson-Koehler’s Edition of *Educator’s Handbook*. White Plains, NY: Longman.

2. VIRTUAL COLLABORATION/NETWORKING:

a. There are three common forms of technology: assistive technology, instructional technology and universal design for learning. Critical to school improvement work for all students is to understand each form and to utilize it in an appropriate manner with the appropriate students.

(1) Assistive technology means any item, piece of equipment or product/system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain or improve the functional capabilities of a child with a disability. (*United States Code of Federal Regulations for the Individuals With Disabilities Education Improvement Act for 2000*. Sec. 20, Subparagraph 1401 (1).

(2) Instructional technology as stated by the Association for Educational Communications and Technology is: "...the theory and practice of design, development, utilization, management and use of techniques or ways to make learning more efficient. The purpose of instructional technology is to affect and effect learning of all students." (Seels, B., & Richey, R. (1994). *Instructional Technology: The definition and domains of the field* (pg 1-9) Washington, DC: Association for Educational Communications and Technology.)

(3) Universal Design for Learning (UDL) is grounded in emerging insights about brain development, learning, and digital media. These 3 principles serve as the core of good UDL practice: (a) Multiple means of representation to give learners various ways of acquiring information and knowledge; (b) Multiple means of expression to provide learners alternatives for demonstrating what they know, and (c) Multiple means of engagement to tap into learners interests, challenge them appropriately, and motivate them to learn. (From Rose, D., & Meyer, A. (2002) *Teaching every student in the digital age*. Alexandria, VA: ASCD)

Resources for these three forms of technology are readily available. Refer to those provided by Dr. Dave Edyburn, University of Wisconsin-Milwaukee, which are included in the following four pages, along with his permission for reproduction.

b. Examples of Online Networks & Forums for Accessing Research

- (1) <https://edstrategies.basecamphq.com>
Kansas Learning Network
- (2) www.classroom20.com
Online forum discussion for using digital tools
- (3) <http://tappedin.org>
Online educational community for collaboration
- (4) <http://www.marzanoresearch.com>
Clearinghouse for research-based instructional strategies
- (5) <http://www.edweek.org/ew/articles/2002/09/04/01gardner.h22.html>
Gardner's quantity & qualities of educational research
- (6) www.nsdc.org
National Staff Development Council's standards, Code of Ethics and materials
- (7) <http://ccsr.uchicago.edu>
Consortium on Chicago School Research builds capacity for school reform
- (8) <http://dww.ed.gov>
Doing What Works provides guides that evaluate effectiveness of teaching practice
- (9) www.myinfinitec.org
A resource for assistive technology and UDL for all schools
- (10) www.ncld.org
An organization dedicated to the research and support of best practices for students particularly with learning disabilities

Instructional Designs for Academic Diversity

by Dave Edyburn, Ph.D.

Academic Diversity

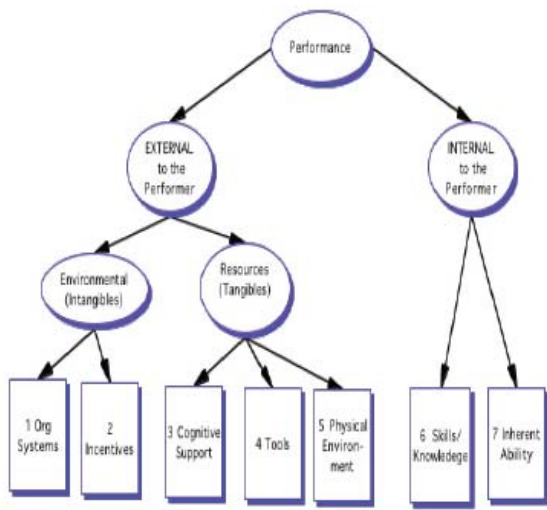
Classrooms are more diverse in terms of race, ethnicity, language, and ability than they have been at any time in history. Teachers must recognize and respond to academic diversity.

One Size Does Not Fill All

We must move beyond the mistaken belief that high standards means there is only one way to complete an academic task. Instruction must be designed to enable learners of all abilities and backgrounds to access, engage, and succeed in mastering core academic tasks.

Components of Performance

Wiley (1996) synthesized five common models of human performance technology to understand the factors that impact performance (see Figure). His analysis reveals that performance is affected by seven variables: (1) organizational systems, (2) incentives, (3) cognitive support, (4) tools, (5) physical environment, (6) skills/knowledge, and (7) inherent ability. In Wiley's estimation, the variables are sequenced in their ease of remediation. That is, performance problems related to organizational systems (#1) are easier to modify than problems associated with intrinsic abilities (#7). The model suggests two interventions that have been historically overlooked as a means for enhancing performance: (#3) cognitive support and (#4) tools.



Distributed by

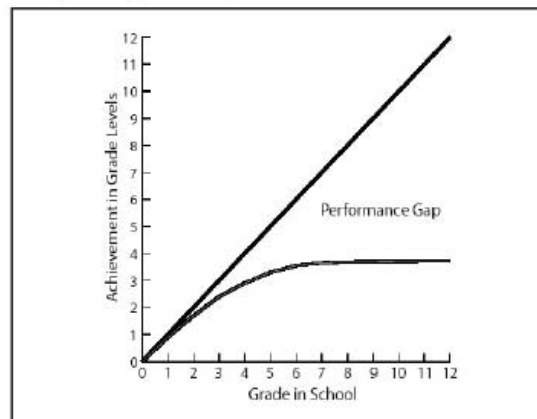
Knowledge by Design, Inc.

<http://www.knowledge-by-design.com>

414/962-0120

The Achievement Gap

Chronic academic underachievement is a significant educational problem. In practical terms the problem can be illustrated in the Figure below. The diagonal line illustrates the expected level of achievement of students: one year of academic achievement for each year in school. However, the dotted line illustrates the pattern of achievement for many under-performing students. The area between the dotted line of performance by low achievers and the diagonal line of expected grade level performance is known as the "achievement gap." No Child Left Behind seeks to close the gap by helping all students achieve at grade level (the diagonal line).



Understanding the Lessons of the Achievement Gap

Given over 50 years of educational research documenting chronic academic underachievement, do we fully understand the lessons of the achievement gap? First, contemporary schooling practices are not effective for all students. Second, continuing to do what we have always done will perpetuate, rather than eliminate, the achievement gap. Finally, repeated failure over time creates an achievement gap that is exceedingly difficult to close.

Tools That Scaffold and Augment Performance

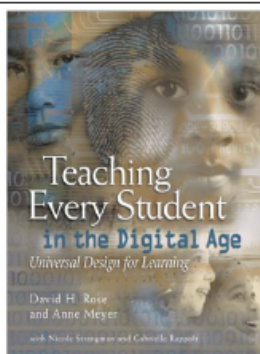
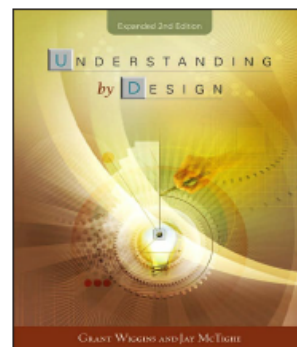
When teachers respond to academic diversity, they provide students with new tools (e.g., software programs, Web sites) during the learning process. If the tool is discarded after the task is mastered, the tool has served as a scaffold. However, if the tool is necessary whenever the task is completed, the tool serves to augment performance. How will you assist students in exploring how various tools can be used to enhance their academic performance?

Instructional Planning Models

Understanding by Design

Understanding by Design advocates an instructional design methodology known as backwards design. Begin by determining what you want students to understand. Then, use standards and big ideas to create meaningful learning activities to will produced the desired understandings and insight.

To learn more: Wiggins, G., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: ASCD.



Universal Design for Learning

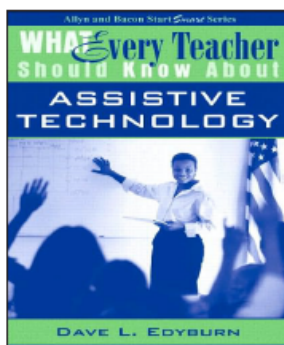
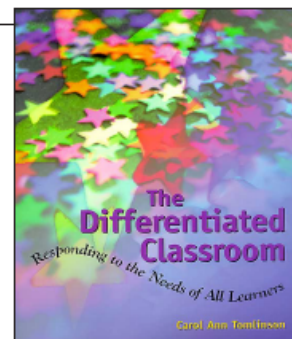
When designing classroom instruction, students with special needs are often forgotten. We expect all students will read the textbook, forgetting about students who are blind, have a learning disability, or who's primary language is not English. Universal Design for Learning advocates seek to create curriculum, instruction, and assessment materials that are flexible and usable by the widest range of functional capabilities. For example, when a required reading is available in a digital format, students can alter the font, size, and color of the text; print the material; read it on the screen; or listen as the computer reads the text to them. Designing instruction the provides multiple means of representation and multiple means of expression, allows diverse learners with opportunities for accessing, and most importantly, enaging in learning.

To learn more: Rose, D., & Meyer, A. (2002). *Teaching every student in the digital age*. Alexandria, VA: ASCD.

Differentiated Instruction

Differentiated instruction is an instructional model that celebrates learner differences. Teachers begin their planning by recognizing that students are individuals and come to the classroom with a variety of backgrounds, interests, skills, and learning styles. Instruction is designed to maximize student choice as a means of engaging diverse students.

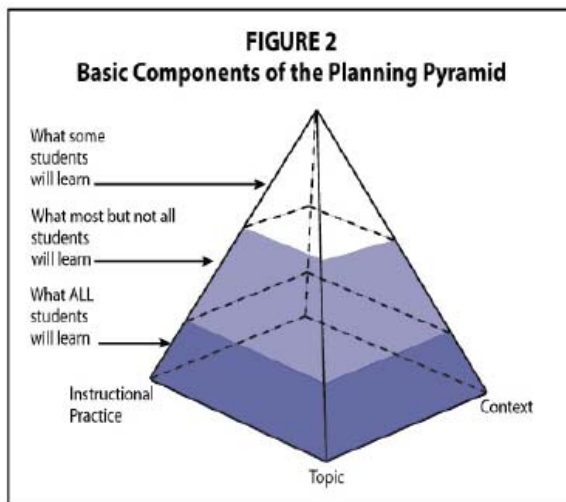
To learn more: Tomlinson, C.A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: ASCD.



Assistive Technology

Assistive technology products are specialized devices that provide individuals with disabilities a means of accessing the curriculum or interacting with the environment. Teachers need to be mindful of the assistive technology that students may bring to the classroom and alert to unmet assistive technology needs. When students struggle to complete tasks involving mobility, hearing, seeing, communicating, learning, and memory, an assistive technology evaluation may be warranted

To learn more: Edyburn, D.L. (2003). *What every teacher should know about assistive technology*. Boston: Allyn and Bacon.



The Planning Pyramid

The Planning Pyramid is a research-based teacher planning intervention. Teachers are asked to analyze their curriculum and determine learning goals and outcomes relative to three levels: what must all students know, what will most students know, and what will some students know. The purpose is not to track students into one of the three levels but to allow students to engage at a level of skill and relevance that is appropriate for their interests and abilities.

To learn more: Schumm, J.S., Vaughn, S., & Harris, J. (1997). Pyramid power for collaborative planning. *Teaching Exceptional Children*, 29(6), 62-66.

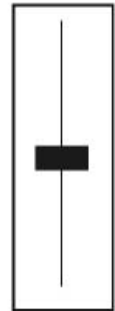
Learning and Performance

The Nature of Learning

Recent advances in the cognitive sciences have provided significant insight about the process of learning. One key insight focuses on the need to move past a definition of learning that is based on the memorization of facts to an emphasis on learning with understanding. In addition, the complexities of 21st century life are demanding more than the acquisition of basic literacy skills in reading, writing, and calculating. New expectations involve: thinking and reading critically, expressing oneself clearly and persuasively, and solving complex problems in science and mathematics. To learn more: access the following online book: *How People Learn* (<http://books.nap.edu/html/howpeople1/>).

Equalizers

Tomlinson (1999) uses the term "equalizer" to discuss the concept of a control that could be used to alter the level of support a student receives. She envisions a number of equalizers that could be developed to control the level of challenge and support diverse student needs throughout the learning process. Consider how you can use this metaphor to design instruction that has multiple levels of support for students as they complete an academic task.



Allocated Time vs Engaged Time

Allocated time refers to the amount of time assigned for learning about a topic. Engaged time refers to the actual amount of allocated time a learner spends engaged in the activities of learning. How will you design learning activities that ensure that students are engaged a maximum amount of time?

Challenge

When a task is too hard to be completed successfully, students get frustrated and disengage. When a task is too easy, students get bored. Learning occurs when the challenge level of a task is "just right." A critical function of teaching is to find the level of challenge that is "just right" for each student.

When Time is Held Constant

Despite the current educational reform rhetoric about high academic standards, educational practice prefers to hold time constant rather than performance. When time is held constant, we move onto the next topic despite extreme variance in student performance. However, if all students are to achieve a given educational standard, then time and tools must be varied to allow diverse learners to achieve the learning outcome.

Development of Expertise

Is the purpose of schooling to become an expert at everything? Ultimately, high levels of learning and performance are only achieved as a result of engagement, sustained over time, in tasks of increasing difficulty and complexity. No one becomes an expert at things they don't like and aren't good at. And, if my initial experience with a new learning task is negative, the lifelong learning outcome is often: "I am no good at ____."

Academic Performance Support

General Search Tools

The following Web site are valuable resources for teachers when planning instruction for diverse learners. Begin by entering a key concept and then browse for materials that will engage students with different skill and interest levels.

4 Teachers

<http://4teachers.org/>

42Explore: Thematic Pathfinders

<http://42explore.com/>

Blue Web'n

<http://www.kn.pacbell.com/wired/bluewebn/>

Cool Spots 4 Kids

<http://www.4kids.org/coolspots/>

Eduscapes

<http://eduscapes.com/>

Google

<http://www.google.com>

Kathy Schrock's Guide for Educators

<http://school.discovery.com/schrockguide/>

TrackStar

<http://trackstar.hprtec.org>

Report Writing

- Provide starting points for student researchers rather than simply directing them to a search engine. Great starting points include: IPL: Teenspace: A+ Reading and Writing (<http://www.ipl.org/div/aplus/>), A Research Guide for Students (<http://www.aresearchguide.com/>), and The Why Files (<http://whyfiles.org>).

- Provide specialized tools for documenting references and citations. Tools such as Easy Bib (<http://www.easybib.com>), Citation Machine (<http://citationmachine.net/>), and NoodleTools (<http://www.noodletools.com>)

Math

- Some students struggle with the computational aspects of math. In these situations, provide access to Webmath (<http://www.webmath.com>).

- Some students struggle with the conceptual understanding of mathematical operations. In these situations, provide access virtual math manipulatives (<http://nlvm>).

Science

- Consider alternative information sources and interactive learning activities as a means of engaging learners that struggle with text-based curriculum materials. Some noteworthy sites to explore: BrainPop (<http://www.brainpop.com>), Cool Science for Curious Kids (<http://www.hhmi.org/coolscience/>), Funology: The Science of Having Fun (<http://www.funology.com/>), How Things Work (<http://www.howthingswork.com>), and Science Made Simple (<http://www.sciencemadesimple.com/>).

Reading

- Search for online instructional materials that featured tiered levels, such as: Ben's Guide to U.S. Government (<http://bensguide.gpo.gov/>) and Windows to the Universe (<http://www.windows.ucar.edu>) so that students can explore the same content at multiple levels of complexity.

- Search for instructional materials that provide built-in text to speech support, such as Star Child (<http://starchild.gsfc.nasa.gov/docs/StarChild/>) and BookBox (<http://www.bookbox.com>) that will allow children to listen to text that they could not read independently. Add resource from CA adult literacy (quote in Web grant?)

- To assist a student in monitoring their own reading comprehension, select an appropriate graphic organizer (<http://www.eduplace.com/graphicorganizer/>) and have the student complete the organizer as s/he is reading or immediately after reading. If an advanced organizer is not available in the teacher's guide, use Inspiration (<http://www.inspiration.com>) or DraftBuilder (<http://www.donjohnston.com>) to create a concept map of the key ideas and organizational structures..

Reading in the Content Areas

- Using integrated scan and read software such as Kurzweil 3000 (<http://www.kurzweil.edu.com/>), Read and Write Gold (<http://www.texthelp.com/>), or WYNN (<http://www.freedomscientific.com/LSG/products/wynn.asp>).

- Scan the text into the computer using Optical Character Recognition (OCR) software such as OmniPage (<http://www.nuance.com/omni page/>), ReadIris (<http://www.irislink.com/>), TextBridge Pro (<http://www.nuance.com/textbridge/>) that are designed to work with most scanners. Or, purchase a scanner with OCR software bundled with it such as PaperPort (<http://www.visioneer.com/>).

- Make the entire web talk. What? How is this possible? By downloading and installing The Reading Bar (www.readplease.com) [Windows, Internet Explorer only] in your web browser, text to speech will be available for any page you view in your web browser. This is an ideal solution when the majority of text information that must be read is available via the web.

Vocabulary Development

- Encourage students to explore the meaning of a word by using the thesaurus. Visual Thesaurus (<http://www.visualthesaurus.com>) can be purchased as a software program or used online. Provides a graphic representation of the antonyms and synonyms for each word entered.