



**TITLE:**

*Center on Mentoring for Effective Teaching (COMET):*  
Early Childhood Partnership's University-Head Start Applied Research Collaborative for Appalachia

**PRINCIPAL INVESTIGATOR:**

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**FUNDER & FUNDING:**

US Department of Health and Human Services; Administration on Children and Families (ACF); Office of Planning, Research and Evaluation (OPRE); #90YR0023; to University of Pittsburgh, Department of Pediatrics; Period: 2008-2011; direct funds: \$400,000; Indirect funds: \$150,000

**FOCUS:**

Implementing a structured, in-classroom, face-to-face mentoring approach to (1) improve the effectiveness of teacher's and teaching aides instructional and management practices in Head Start classrooms, affiliated early care and education centers, and kindergartens and (2) to enhance the early literacy and social behavioral competencies of at-risk children for early school success

**PARTNERS:**

Head Start and affiliated early childhood intervention programs in the underserved and under-resourced Appalachian regions of Pennsylvania and West Virginia;

- Beaver County Community Action Head Start/Aliquippa School District
- South Side School District—Kindergarten programs, rural Beaver County
- Northern Panhandle of West Virginia Head Start
- Pittsburgh Public Schools, Head Start and Pre-K programs
- Fayette County Head Start
- Westmoreland County Head Start
- Washington and Greene Head Start
- 4KIDS in Braddock

**PARTICIPANTS:**

The COMET research will have a direct impact on the professional development of teachers and assistants and improvement in teaching effectiveness which will have a complementary influence on the performance of young children during preschool and for success in the early grades:

- 1600 at-risk children 3-6 years of age and their families
- 200 teachers and teacher assistants
- 100 education supervisors and coaches
- 100 classrooms
- ECE programs in a wide-area of southwestern PA and WVA

**HYPOTHESIS:**

- Ongoing, individualized mentoring with teachers encourages the effective use of effective educational practices which foster the development of specific early school success competencies in young children.

**RESEARCH QUESTIONS:**

- Objective One: Individualized coaching, professional development, mentoring & collaborative supervision will result in measurable increases in teacher's use of effective & evidence-based instructional & management behaviors with young children
- Objective Two: Teachers receiving tailored (individual & group peer) mentoring will demonstrate more effective use of specific evidence-based instructional & management behaviors than teachers not receiving individualized mentoring
- Objective Three: Children of mentored teachers will show better progress than children of un-mentored teachers in acquiring prerequisite early school success competencies:
  - ☐ Early literacy skills
  - ☐ Social skills
  - ☐ Self-regulatory behaviors

**RESEARCH DESIGN:**

- 100 randomly assigned classroom teaching teams (teacher & teacher assistant); n=200
  - 50 Teams—COMET Mentoring [Experimental group]
  - 50 Teams – No Mentoring [Control group]
  - 50 Teams—after one-year No Mentoring group will receive COMET Mentoring

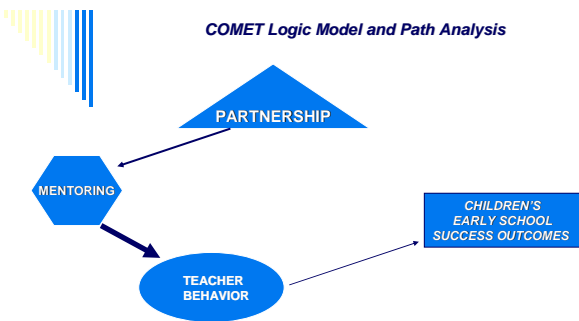
	Pre	Intervention	Post	FU		
R (COMET)	O	X	O	O	X	O
R (No Mentor)	O		O			

-----TIME-----

O= Classroom observations (Pre; Post; and Followup-FU)

X= Mentoring

**LOGIC MODEL:**



**COMET MENTORING MODEL:**

Primary Elements:

- Structured, uniform mentoring process based on Buysee & Wesley (2006). *Consultation in early childhood settings*. Baltimore, MD: Paul Brookes Publishing, Inc.
- "In-vivo", in-classroom, face-to-face mentoring with teachers
- Equal focus on teacher assistants
- Central role of program's liaison to infuse mentoring into Head Start program's routine
- Individual modeling of effective strategies for teachers with children by mentors (see triangle below)
- Individualization of mentoring by Mentoring for Effective Teaching (MET) plans and goal-attainment (see below)
- Focus on link between mentored practices and actual teacher behaviors
- Teachers and program attain University of Pittsburgh continuing education credits for participation in COMET mentoring and Act 48 CEU and PQAS credits
- Customized mentoring for each partner site within uniform model
- COLT model to design regional professional development consortium in Appalachia

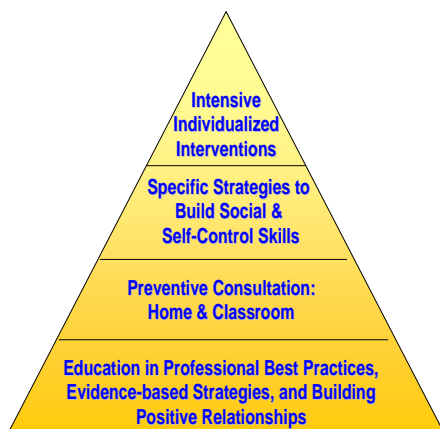
Mentoring for Effective Teaching (MET) Plan example

**MET Planner**

- Focus:** Teacher instructional and management strategies which foster early learning and social behavior
- Approach:** Individual and group peer mentoring

<u>JOINT GOAL</u>	<u>MENTORING</u>	<u>ATTAINMENT</u>
➤ Eye level communication	Modelling	0 1 2
➤ Frequent group questions	Modelling	0 1 2
➤ Praise for effort	Modelling	0 1 2
➤ Verbal/physical prompts	Modelling	0 1 2
➤ <u>Child retells directions</u>	<u>DI resources</u>	<u>0 1 2</u>

Continuum of Supports for Teachers and Children: Teaching Pyramid



### ***EVALUATION RESEARCH MEASURES:***

Objective observational measures are collected before, during, and after mentoring and in no-mentoring group about specific instructional and management behaviors of each teacher and assistant

- ***Early Language & Literacy Classroom Observation (ELLCO)***
  - "There is strong/some/minimal evidence of a systematic approach to children's writing that supports their development."
- ***Inventory of Practices for Promoting Social Competence (IPPSC)***
  - "Communicates with children at eye level."
  - "Teaches that all emotions are okay, but not all expressions are okay."
- ***Classroom Assessment Scoring System (CLASS)***
  - "The majority of students appear distracted or disengaged"; or "The majority of students are passively engaged, listening to or watching the teacher"; or "Most students are actively engaged...".
- ***SPECS Mentoring Monitor***
  - Matrix to classify the intensity and components of mentoring for each teacher based on need for support

### **Context and Potential Impact of the COMET Research & COMET Plus**

The COMET federal funding for research and the COMET Plus Heinz funding for model and materials development has the strong potential to dovetail in important ways.

The US Department of Health and Human Services, Administration on Children and Families intends that the outcomes of the funded research will influence the direction of federal policy to Head Start and early childhood education on the provision of effective professional development and mentoring to enhance the instructional and management practices of teachers. The literature in early childhood is devoid of such research. Our COMET research will provide important direction in this regard to influence federal policy.

Dr. Bagnato as the Principal Investigator on the COMET research grant was one of only 7 awardees nationally to gain this distinguished funding. The alignment between Heinz and federal funding can enable our COMET team at Early Childhood Partnerships to conduct ground-breaking studies which will demonstrate the efficacy of a specific model of providing teachers with individualized professional development through mentoring--on-site in rural regions that are underserved. Moreover, the Heinz funding can enhance the federal research by producing hard copy and web-based materials to underpin the COMET mentoring process and its research and for replication by others in the US. In the future, these materials and web options will be made available and accessible to programs.

Within Pennsylvania, COMET and COMET Plus will influence the work of coaches and consultants in the Keystone Stars system and will enhance the professional development of teachers in Pre-K Counts. Currently, Keystone Stars uses neither a uniform nor a field-validated model to consult with teachers across PA programs. All coaches use their own experience in the consultation process; thus, no comparisons can be made about what elements enhanced or detracted from a teacher's practices. COMET will provide this critical "missing feature" of a responsive and effective mentoring process for ongoing professional development in the field.