2005

The Curry/Samara Model and The Model Classrooms Project Background and Research Foundations

Gloria J. Gresham Dr.
Stephen F. Austin State University, greshamglori@sfasu.edu

Ronnie Porter

Model Co-Authors:
James Curry, Ph.D. and John Samara

Article Co-Authors: Jeanie Gresham, Ed.D. and Ronnie Porter

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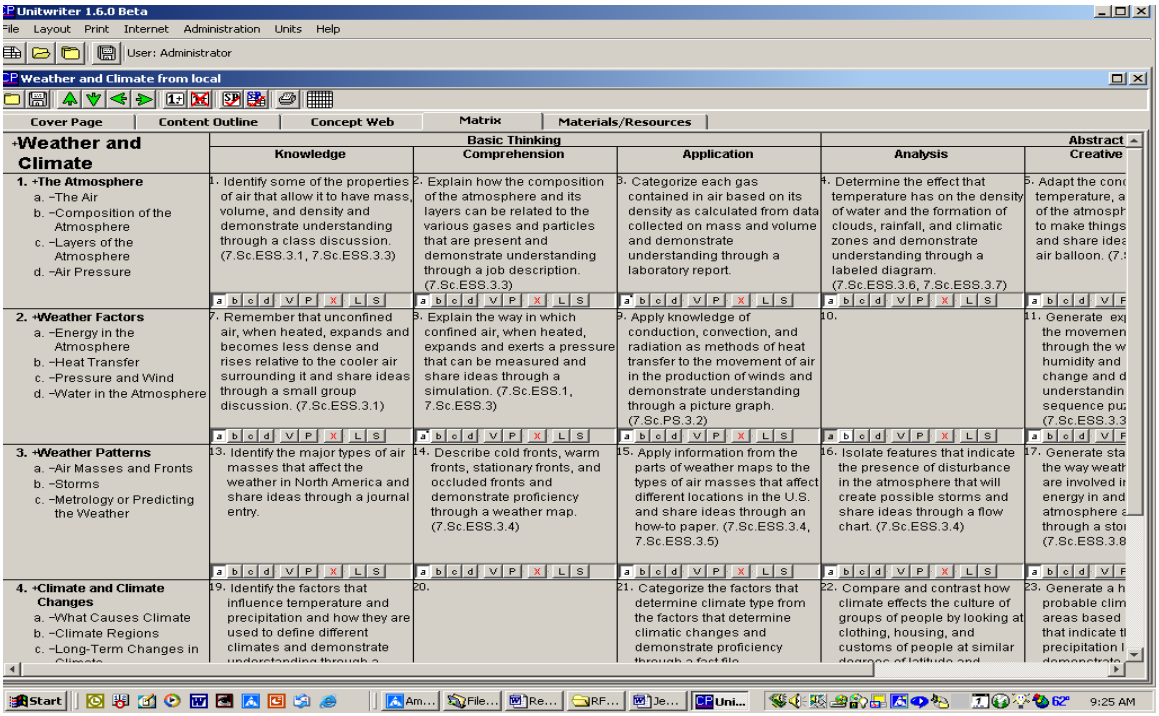
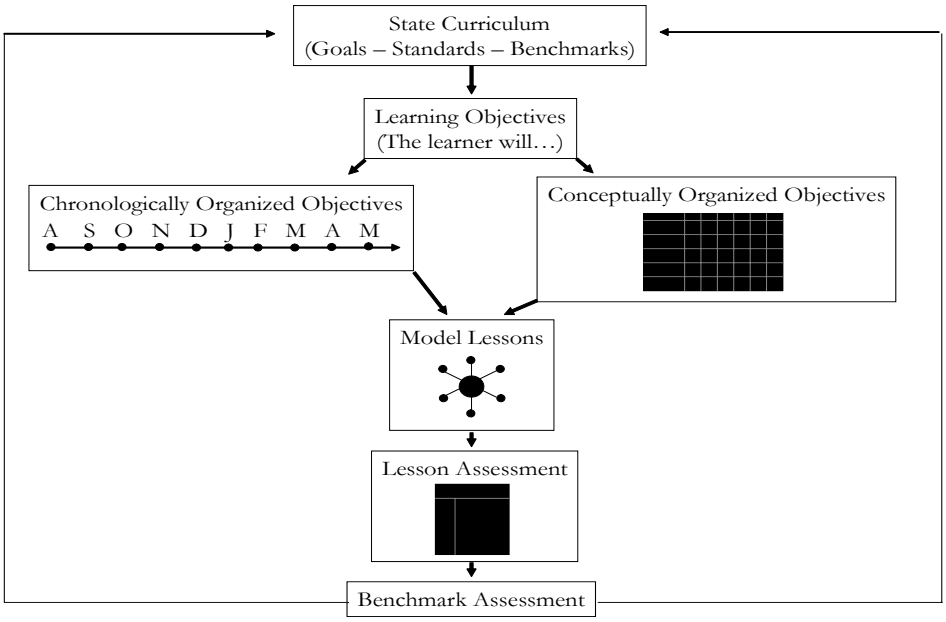
The Curry/Samara Model(CSM) is an integrated, standards based approach to curriculum development that addresses differentiation from three dimensions (content, process & product). CSM is comprised of strategies related to curriculum, instruction and assessment that helps teachers to: (1) complement factual subject matter with rich, global concepts; (2) foster basic and abstract levels of thinking as related to core content; and (3) engage and assess students through traditional as well as innovative, authentic products.

McGehee (2001) supported the belief that teachers must have a well-developed curricular knowledge of the big ideas in a content area. Building on this expectation, Curry and Samara developed the Unit Matrix as the hallmark of their Model. The Matrix provides teachers with a tool for creating units of study that organizes their content to effectively complement basic knowledge with complex ideas, concepts and themes. In addition, within each matrix cell block, objectives related to the specific subject matter must be written at all levels of thinking and with products from all modalities (visual, oral, written, and kinesthetic). Concept-driven unit development helps students learn how to learn (Ornstein, 1997); the Curry/Samara Matrix provides teachers with a format for this development.



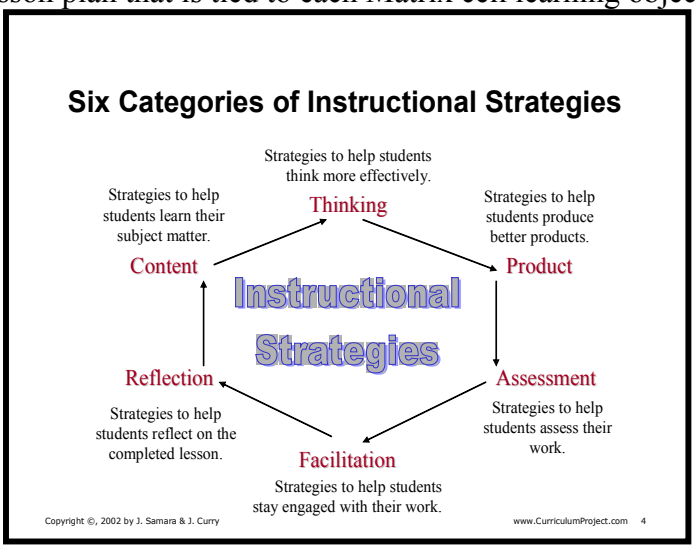
Recently, virtually every state department of education has developed or is in the process of developing comprehensive standards for learning that encompass grades K-12 (Glidden, 1998). As reinforced by Marzano (1999), "Quite obviously, if the standards movement across the states is to make a difference in the achievement and learning of students, then classroom curriculum must be organized around standards. Fortunately, research provides some clear guidance to this end. {A large number of studies have demonstrated that one of the defining features of effective classroom curriculum is that it is organized around specific learning objectives.}" (p. 15). As an example, the Illinois State Department of Education organized required learning by creating *Goals* as broad statements of knowledge and/or skills that organize subject matter in each learning area. *Learning Standards* were created as specific statements of knowledge and/or skills within a goal. The standards clearly define the required learning that must be achieved in order to reach each goal. Further, *Learning Benchmarks* have been developed that are used to gauge student achievement of each standard. Benchmarks are also used over time as a guide for instructional modifications and adjustment. Learning standards are organized into clusters for early elementary, late elementary, middle/junior high, early high school and late high school.



To support the achievement of state level required learning or standards, the Curry/Samara Model® provides a seamless and user friendly process for translating learning standards into learning objectives that guide all aspects of classroom instruction. The CSM format assists teachers in articulating quality cognitive objectives that incorporate the types of thinking and product(s) that students will use to manipulate the required content. These cognitive objectives require teachers to focus thinking on the content (for example: create a new level of the rainforest that will protect an endangered species and share ideas through a brochure, vs. create a brochure of the rainforest) and to indicate the product, performance or project through which students will share their new knowledge. A cognitive verb, content description, and product are the key components of a cognitive or learning objective and when posted daily in the classroom, provide students a clear description of the expectations of learning for each lesson.

Fraser, Walberg, Welch, & Hattie (1987) further support the belief that if state standards are to make a difference in student performance, curriculum must be organized around those standards. Chronologically organized objectives frequently serve as a district's pacing guide to articulate content points that students should reach by the end of a week, grading period or school year. On the other hand, the objectives of a CSM unit are organized around a concept-driven curriculum unit, that can be directly linked to applicable state standards.

The Curry/Samara Model is designed to foster improved student performance for *all* students through the coordination of six categories of effective instructional strategies: content, thinking, product, assessment, facilitation, and reflection. These strategies are articulated by the teacher in the CSM lesson plan that is tied to each Matrix cell learning objective.



Content strategies involve the information and skills that students learn, which are often prescribed by the school district or state departments of education. As stated by (Ediger, 1996), "Trivia must always be weeded out when selecting subject matter for learner achievement" (p. 59). Content must be challenging if students are to achieve (Ediger, 1996). Content may be divided into two parts: factual and global. Factual content includes the facts, details, and rules that relate to the topic of study. Global content includes the issues, problems, and themes related to a field of study. Specific strategies for differentiating content for all students are encouraged, using state content standards as the foundation for differentiation.

Thinking strategies are composed of cognitive tools students use to process content. Six levels of thinking encourage teachers to expand the students ways of thinking about content, and to encourage students to think about thinking skills. As supported by Ming Su, Masoodi, Kopp, & Klonowski (1998), metacognition or thinking about thinking must be emphasized. The levels of thinking are divided into two parts: basic and abstract levels of thinking. The basic levels of thinking are knowledge (recalling), comprehension (understanding), and application (applying to other situations). Abstract levels of thinking include analysis (examining in detail), creative thinking (changing or creating), and critical thinking (justifying). When designing CSM, Curry and Samara were inspired by Benjamin Bloom's six levels of thinking. Ball & Washburn (2001) supported the use of Bloom's Taxonomy to extend student learning beyond the knowledge level and to solve problems. Curry and Samara's model differs from Bloom's model at levels five and six. Bloom's level five, synthesis, and level six, evaluation, are termed creative thinking and critical thinking, respectively, in CSM. According to the observations of Curry and Samara,

teachers very easily relate to the four creative thinking skills of fluency, flexibility, originality, and elaboration. As teachers benefit from categorically labeling creative thinking, students also learn to think categorically. Creative thinking involving the four component parts is more complete than labeling the thinking level synthesis. In addition, critical thinking in actuality is weighing different sides of a coin or being able to defend one's point of view and justifying one's reasoning. It seems to Curry and Samara that critical thinking is a more descriptive term than evaluation.

The third category of instructional strategy is product. Products are vehicles for constructing meaning and demonstrating proficiency with content. By examining products that students create, teachers gain feedback on the effectiveness of instruction (Day & Skidmore, 1996). Products may be traditional, common and simple, or innovative, diverse and complex. CSM provides students with an array of product option, and categorizes products according to four modalities: kinesthetic, oral, visual, and written. Encouraging use of products from all modalities provides for an avenue for instructional differentiation, and by establishing clear, consistent performance standards students are guided to reach higher levels of achievement.

Assessment, according to Curry and Samara, relates to the varied and effective materials and instructional strategies that teachers use to facilitate growth in *all* students, regardless of ability. As teachers and administrators continue to examine the teaching and learning process, assessment is an integral link in programs where students make progress toward expected standards (Day & Skidmore, 1996). Assessment involves the use of objective language in defining standards for quality work and feedback (self, peer, teacher) to students concerning their achievement in reaching these standards. McTighe (1996) states "the principle of establishing clear performance targets and the goal of teaching for understanding fit together as a powerful means of linking curriculum, instruction, and assessment." Lesson assessment is the type of evaluation targeted in CSM, and lesson assessment supports campus and district benchmark assessment in reaching state academic standards. Curry and Samara have created various tools to assist teachers in creating lesson assessments: Product guides and Standwriter™ software. Product guides help teachers establish clear guidelines for products, projects, assignments and portfolio entries. Standwriter™ is a software program that allows teachers to create achievement standards in the form of rubrics and product guides.

The last two categories of instructional strategies are facilitation and reflection. Facilitation, entails the strategies that teachers use to bring about enthusiasm, engagement with content, standards-based production, and collaboration with peers. Facilitation relates to what teachers do to ensure that students are actually engaged in meaningful work that provides them with ample time to construct meaning and demonstrate proficiency with content. The importance of facilitation is confirmed by McTighe (1996) by stating that research and experience confirm that when students perceive classroom activities as meaningful and pertinent they are more likely to have a positive attitude toward them. The final category of reflection involves the strategies that help students relate the most important points of a lesson to a larger point of reference. During reflection, teachers and students engage in a process that allows them to consider and examine their practice (Pope, 1999).

Important to implementation of the Curry/Samara Model® in a campus or district is benchmark assessment. Lesson assessment, advocated in the Model Classrooms Project (discussed below), as a source of information followed by correction action is necessary for students to meet state standards (Guskey, 2003), but periodic benchmark assessment is also critical. Curry and Samara believe that teachers need to implement formative benchmark

assessment. Each state standard needs to be assessed frequently enough so that interventions can be implemented for students who are falling through the cracks. In support of periodic testing Gandal & McGiffert (2003) state, "Just as medical tests help diagnose and treat patients, rigorous and meaningful education assessments can help ensure the academic health of all students" (p. 39). By addressing these six specific instructional strategies, with measurement of student success in achieving the stated cognitive objective through authentic assessment, teachers and campus administrators are provided with benchmark assessments on a regular basis.

Validation of the Curry/Samara Model®

For the past 10 years, Curry and Samara have implemented components of the Curry/Samara Model® in Texas, Illinois, Ohio, among others. One example of successful implementation occurred in Aldine Independent School District (AISD) in Houston, Texas. The Project was implemented in McArthur vertical team in AISD. McArthur Vertical Team was composed of McArthur High School and the feeder campuses. Seventy (70) percent of the students in McArthur Vertical Team were Hispanic and approximately eighty (80) percent were considered economically disadvantaged. Henderson (2000) stated that a key to achieving vertical alignment and increased student performance was staff development. Samara and Curry helped teachers in implementing effective instructional strategies through training in the Curry/Samara Model of curriculum development and the Model Classrooms Project. Over a five-year period student state assessment data indicated drastic increases in student performance.

	READING % Passing—All Students						MATH % Passing—All Students						WRITING % Passing—All Students					
	'99	'98	'97	'96	'95	'94	'99	'98	'97	'96	'95	'94	'99	'98	'97	'96	'95	'94
MacArthur High School	89	84.9	82.6	72.7	71.4	64.5	82	74.7	66.7	56.1	48.1	43.9	88.6	85.1	87.3	80.4	86.1	73.8
District High Schools	86.1	82.7	81	76	71	70	80.3	75.2	69.4	56	53	46	88.1	85.7	85.6	80	84	76
State High Schools	88.8	87	84	82	76	76	81.6	78.4	72.6	66	60	57	90.6	87.4	85.3	86	86	81

Additionally, the Curry/Samara Model was a component of a dissertation study, Elementary teacher's perception of involvement in an inclusion-curriculum model of staff development conducted by Linda Diane G. Patin. Linda Patin (2000), gifted and talented program director in Aldine Independent School District, discovered that the district's gifted and talented program did not reflect the demographics of the school district. In order to address this issue, a comprehensive, long-term staff development for teachers integrating the Curry/Samara Model® was implemented. The staff development focused on meeting the curriculum and instructional needs of gifted students while assisting teachers in infusing instructional strategies into the curriculum for both general education and special program students.

The purpose of Patin's five-year study was to examine teachers' perceptions of benefit from participation in long-term inclusion staff development. The study employed a survey designed to correlate with the parts of the Model used and the goals of staff development. The survey served as a focal point for the assessment of teachers' perceptions of participation and anecdotal information provided for in-depth perspectives of the statistical results.

Survey Results by Statistical Mean and Standard Deviation by Item and by Year
SD=Standard Deviation

Year	92-93		93-94		94-95		95-96		96-97	
Sub Scores	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Special Program	7.98	0.69	8.03	1.06	8.07	1.06	8.08	1.42	7.84	1.76
Number	17		40		48		67		52	
General Program	8.05	0.85	7.88	1.42	7.57	1.37	7.69	0.99	7.83	1.67
Number	15		21		19		14		6	

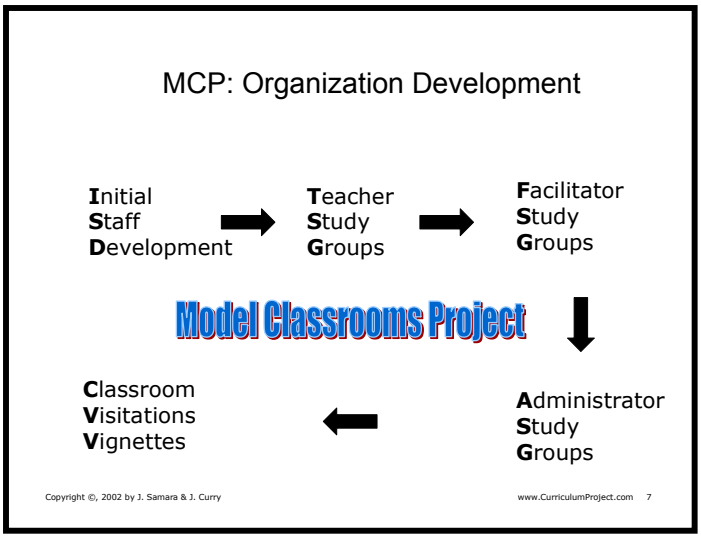
The statistical findings of the study supported the null hypothesis: There is no statistical difference between general education teachers and special program teachers in their perceptions of benefit as a result of participation in an inclusion curriculum staff development. Furthermore, the findings indicated that collaborative staff development that includes the Curry/Samara Model® assists districts in utilizing special program funds and personnel more efficiently to develop consistent standards of excellence for all students.

The Model Classrooms Project

It is clear that the strategies that teachers use with their students is, in the end, what will dictate improved performance for all. The Model Classrooms Project (MCP) supports an ongoing, coordinated focus on effective instructional strategies, with a goal of assisting all students in achieving high levels of learning. Curry and Samara believe that an organization's ability to achieve excellence depends on its ability to adopt, sustain, and develop processes and structures that continually improve student performance. Quality expert W. Edward Deming estimates that 85% of the barriers to improvement reside in an organization's structures and processes, not in the performance of individuals (National Staff Development Council, 1995).

Staff Development
+ Organizational Development
Capacity

The MCP focuses on developing structures and systems to improve organizational effectiveness. Protheroe (2002) adds support to the belief that an organization provides a stage for staff development where professionals share experiences and gain knowledge from one another. The Model Classrooms' organizational development design is comprised of five components including: (1) initial staff development; (2) teacher study groups; (3) facilitator study groups; (4) administrator study groups; and (5) classroom visitations and vignettes (see figure 1). The six categories of instructional strategies, described within the Curry/Samara Model, are the focus of attention in each component of the MCP.



Initial staff development usually consists of two days. Building administrators are key to the success of the Project and should attend both days of the initial staff development as should all teachers who will serve as Study Group Facilitators; teachers who will be implementing the Project can attend one or both days. *Day one* involves an overview of the Curry/Samara Model of curriculum, instruction, and assessment. Participants leave the day with a basic understanding of the Curry/Samara Model and with skills to refine their approach to instruction. *Day two* involves specific information on how to run the Model Classrooms Project. Participants will leave the day with strategies to implement the Project at the building level on an ongoing basis.

After the initial staff development phase is complete, the district or campus is set to begin the remainder of the MCP organizational development. At this juncture the MCP differs from most of the staff development initiatives implemented today. As stated in the National Staff Development Council's Standards for Staff Development (1995), Curry and Samara support the belief that staff development includes high-quality ongoing training programs with intensive follow up and support. Teacher Study Groups involve six, forty-five minute meetings per year in which Study Group Facilitators (who are trained in day two of the initial staff development) assist a small group of colleagues in discussing specific instructional strategies, writing a goal for a new strategy to implement during the coming month, and reflecting on the benefits of various instructional strategies. At the elementary level, study groups are comprised of grade level or grade span teams. At the middle school level, study groups are comprised of departmental teams or interdisciplinary teams. At the high school level, study groups are comprised of departmental teams.

In order to assure that Study Group Facilitators are supported in ways which allow them to successfully facilitate their teacher groups, MCP includes a component titled Facilitator Study Groups. The facilitator groups involve six, forty-five minute meetings per year, occur at the campus level, and are led by a Curriculum Project consultant, a building level administrator, or by district level personnel.

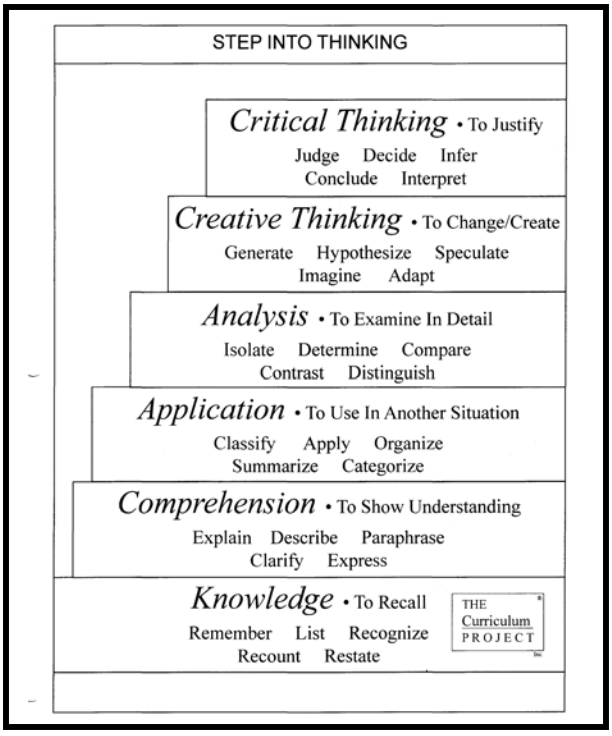
Critical to improved student performance is administrator training and support. Administrator Study Groups are for building administrators whose teachers are implementing the Model Classrooms Project. The administrator groups typically take place as a part of existing administrator sessions and are intended to assist building administrators in developing

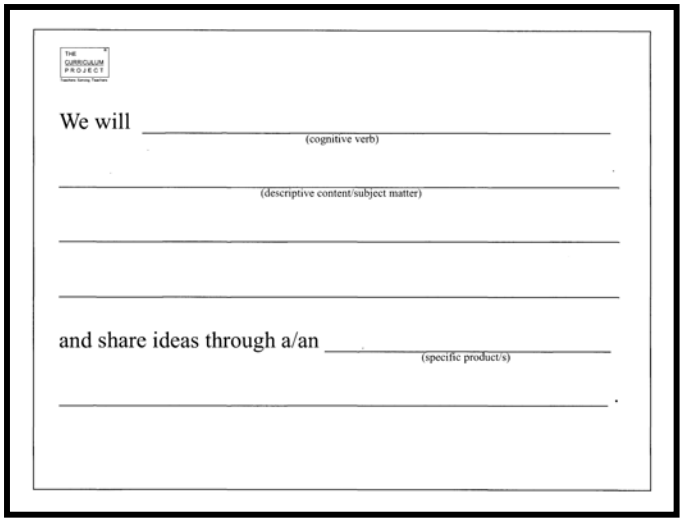
instructional leadership skills and habits that bring about increasing levels of instructional excellence at the building level.

Finally, a campus or district may choose to add an additional dimension to the Project. The National Staff Development Council (1995) supported the belief that classroom observation, feedback, and reflection assist teachers in improving instructional practice. Dewey (1933) and Black (2001) also advocated that teachers should think systematically about practice to improve teaching. In order to provide this critical element, the MCP organizational design includes classroom visitations. Classroom visitations involve a Curriculum Project consultant for one or two days of classroom visits per participating campus per year. The consultant observes the beginning, middle, and end of one lesson per five or six teachers through the day. Digital photographs and notes (in a PowerPoint format) are used to articulate promising practices observed. The vignettes are learning tools that help teachers celebrate their successes.

The objective of MCP's organizational development design is to gain breadth and depth through sustained professional development. Breadth is achieved as a pebble breaks the water in a pond. At first, the water is indented, then, waves move quickly from the center. Through study group leaders and district administrators, improved instructional strategies in classrooms permeate and thus, student performance is enhanced.

Depth is gained by assisting teachers to change practice over time or as Schon (1987) terms, "construct knowledge-in-action." The Model Classrooms Project involves three levels of implementation: environment, teacher behavior, and student behavior. At first, teachers are asked to add additional components to the environment of their classrooms such as posted lesson objectives (figure 2) and displayed thinking posters that list the levels of thinking (figure 3). Next, teachers are encouraged to begin changing their behavior. Teachers use overt language or practices that enhance their implementation of MCP. Last, and most importantly, student behavior is changed as they become engaged in defining levels of thinking, global concepts related to their studies, and standards for their own products and projects.





The Curriculum Project, Inc www.CurriculumProject.com offers services, products, and software to support teachers in the creation of Curry/Samara Model® curriculum units; to assist teachers in addressing state mandated standards within their units of study; and to implement the Model Classrooms Project on their campus.

Jeanie Gresham, Ed.D has thirty years of experience in public school education. This experience includes classroom instruction in 1st grade, Gifted/Talented for K-5, and Special Education for grades 1-5, elementary counselor, campus administrator and district level executive director of instruction.

Ronnie Porter has thirty years of experience in public education. Included in this experience is over eighteen years of classroom instruction encompassing grades seven through twelve and twelve years of experience in central administration as a coordinator of instruction and director of curriculum.

References

Ball, A. L. & Washburn, S. G. (2001). Teaching students to think: Practical applications of Bloom's Taxonomy. The Agricultural Education Magazine, 74(3), 16-17.

Black, S. (2001). Thinking about teaching. American School Board Journal, 188(11), 42-44.

Day, V. P, & Skidmore, M. L. (1996). Performance assessment and curricular goals. Teaching Exceptional Children, 29(1), 59-64.

Dewey, J. (1933). Democracy and Education. New York: Free Press.

Ediger, M. (1996). Sequence and scope in the curriculum. Education, 117(1), 58-60.

Fraser, F. J., Walberg, H. J., Welch, W. W., & Hattie, J. A. (1987). Synthesis of educational productivity research. Journal of Educational Research, 11, 145-252.

Gandal, M. & McGiffert, L. (2003). The power of testing. Association for Supervision and Curriculum Development, 60(5), 39-42.

Glidden, H. (1998). Making Standards Matter. Washington, D. C. :American Federation of Teachers.

Guskey, T. R. (2003). How classroom assessments improve learning. Association for Supervision and Curriculum Development, 60(5), 7-11.

Henderson, C. (2000). Vertical teams yield vertical achievement in southeastern Texas school district. Education in Practice, 9, 9-12.

McGehee, J. J. (2001). Developing interdisciplinary units: A strategy based on problem solving. School Science and Mathematics, 101)7), 380-389.

McTighe, J. (1996). What happens between assessments? Educational Leadership, 54(4), 6-12.

Marzano, R. J. (1999). Building curriculum and assessment standards. High School Magazine, 6(5), 14-19.

Ming Su, W., Masoodi, R., Kopp, M., & Klonowski, E. (1998). Infusing teaching thinking skills into subject-area instruction. Nurse Educator, 23(4), 27-30.

National Staff Development Council. (1995). Standards for Staff Development. Oxford, Ohio: National Staff Development Council.

Ornstein, A. C. (1997). How teachers plan lessons. The High School Journal, 80(4), 227-237.

Patin, L.D.G. (2000). Elementary teachers' perceptions of involvement in an inclusion-curriculum model of staff development. Doctor of Education Disseration, University of Houston, May, 2000.

Pope, C. A. (1999). Reflection and refraction: A reflexive look at an evolving model for methods instruction. English Education, 31(3), 177-200.

Protheroe, N. (2002). More learning strategies for deeper student learning. The Education Digest, 68(4), 25-28.

Schon, D. (1987). Educating the Reflective Practitioner. San Francisco: Jossey-Bass.