Exhibit O

BALTIMORE COUNTY PUBLIC SCHOOLS

DATE: December 21, 2010

TO: BOARD OF EDUCATION

FROM: Dr. Joe A. Hairston, Superintendent

SUBJECT: <u>REPORT ON THE QUALTITY MANAGEMENT SYSTEM PROCESS</u> <u>FOR CURRICULUM DEVELOPMENT</u>

ORIGINATOR: John Quinn, Acting Associate Superintendent for Curriculum and Instruction

RESOURCE

PERSON(S): Patricia Baltzley, Acting Executive Director, Department of STEM Cindy Dennis, Elementary Coordinator, Office of Mathematics Prek-12

RECOMMENDATION

That the Board of Education receives an update on the Quality Management System: ISO 9001 for curriculum development.

Attachment I: Executive Summary for the Report on the ISO 9001 Process for Curriculum Development

Attachment II: ISO Processes and PreK Mathematics Power Point

BALTIMORE COUNTY PUBLIC SCHOOLS Division of Curriculum and Instruction

Executive Summary Report on the ISO 9001 Process for Curriculum Development

The Baltimore County Public Schools (BCPS) started its quality performance initiative in the spring of 2009 to more effectively manage the central office department processes that are utilized in providing the services required by school principals to enable their schools to meet the standards outlined in the *Blueprint for Progress* and effectively implement their school improvement plans. The use of a quality management system is an important strategy for helping the school system achieve its three main goals: 1) to improve achievement for all students, 2) to maintain a safe and orderly learning environment in every school, and 3) to use resources in an effective and efficient manner. This report focuses on Curriculum Development, one of three core business processes that involve the Division of Curriculum and Instruction (C&I). The other two core business processes are Professional Development related to the curriculum Writing process and Curriculum Assessment/Evaluation. The ISO process for Curriculum Development is in compliance with Board of Education Policy 6000, Curriculum and Instruction, and Policy 8130, Formulation.

The core process for curriculum development begins with the identification of the need for a new/revised curriculum and includes an examination of multiple sources of data such as state and national standards, advances in technology, teacher and principal feedback, and student performance. The process also includes the identification of the requirements for a new/revised curriculum; the provisions for review of the adequacy of the new/revised curriculum in meeting the stated requirements; and provisions for the planning, piloting, implementation, and evaluation of the new/revised curriculum.

The PreK Mathematics Curriculum, which was approved for systemwide implementation for the 2010-2011 school year, was the first BCPS curriculum to be developed using the ISO 9001 process and serves as an exemplar for other curriculum development efforts. The decision to conduct a major revision of the PreK Mathematics curriculum stemmed from the recommendations made in the 2007 Curriculum Management Audit performed by Phi Delta Kappa International as well as a change in the emphasis by the Maryland State Department of Education for mathematics instruction for pre-schoolers. In addition, the PreK Mathematics Curriculum involved a close collaboration between mathematics and other offices within C&I that resulted in a well-received pilot curriculum. Extensive feedback from principals, teachers, and other stakeholders at the pilot schools guided the rewriting efforts that led to the creation of the final curriculum product. Professional development was provided to all PreK pilot teachers throughout the pilot and to all PreK teachers prior to systemwide implementation. The Office of Mathematics PreK-12 currently continues to monitor and evaluate this curriculum during its first year of implementation.



BCPS Quality Management System: Curriculum Development

Achieving the goals of the Blueprint for Progress



ISO 9001 Curriculum Development Process

- Overview of the ISO 9001 Curriculum Development Process
- Review of Pre-Kindergarten Mathematics Curriculum

Curriculum Development Process Analysis and Planning

- Content Offices establish Content Oversight Committees
- Long and short term plans are created based on data analysis and needs
- Curriculum analysis conducted

Curriculum Development Process Proposal and Approval of Pilots

- Curriculum workshop proposals submitted
- Pilot sites proposed and approved
- Pilot data gathered and pilot curriculum analyzed
- Modifications made to piloted curriculum

Curriculum Development Process Systemwide Implementation

- Implementation plan formulated materials and professional development
- Approval obtained
- Implementation conducted and monitored

ISO Documentation

- Level One: Quality Management System
- Level Two: Curriculum Development Process
- Level Three: Curriculum Development Handbook and BOE Policies
- Level Four: Forms and Templates
- Level Five: Records

Rationale for New PreKindergarten Curriculum

Analysis of the Current PreK Program
Identification of Curriculum Needs

PreKindergarten Curriculum Development

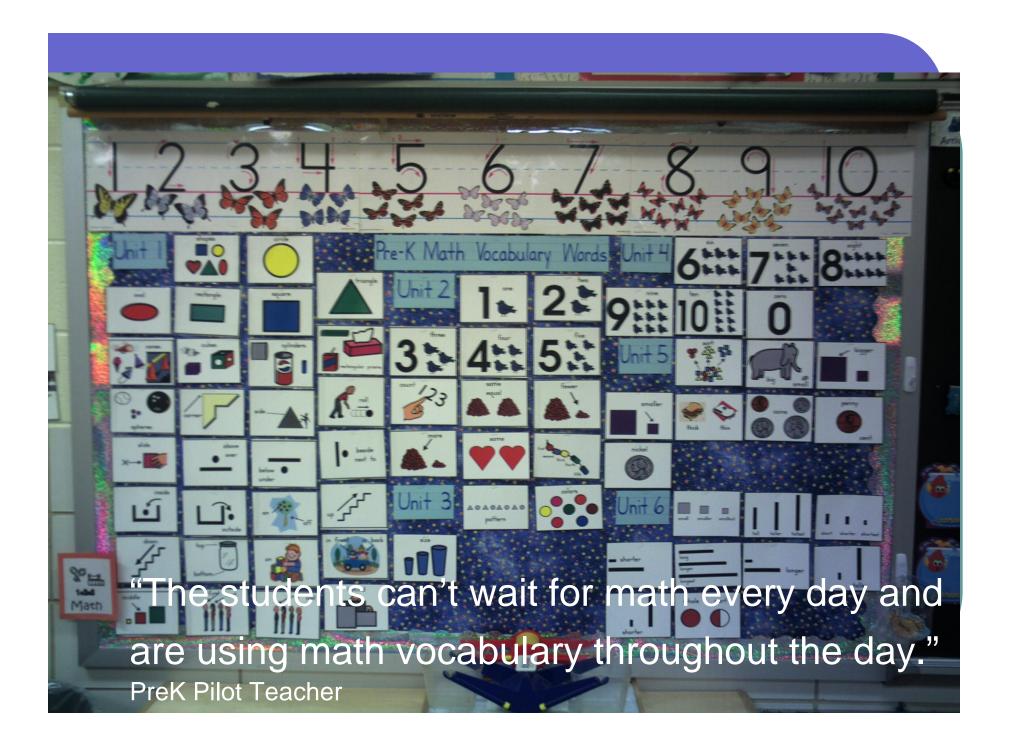
- Initiation of Action Plan
- Development of PreK Pilot Curriculum
- Implementation of PreK Pilot and Revisions

PreKindergarten Curriculum Development

- Review and Approval Process
- Professional Development
- Systemwide Implementation

PreKindergarten Curriculum Assessment and Evaluation

- Ongoing Curriculum Evaluation
 - Monitor, assess, and evaluate the effectiveness of the new PreK Mathematics Curriculum
 - Revise as needed
 - Continue annual evaluations according to the short and long-term review cycles



PreK Pilot Teacher Quotes

"I have seen my students grow and develop math readiness skills for kindergarten."

"I have seen an improvement in one-to-one counting, sorting, graphing, and patterning skills compared to previous years."

"Lessons are engaging, hands-on, developmentally appropriate, and provide students with a strong foundation in math."

Prek Teacher Implementation Quotes Fall 2010

"The curriculum guide is a wonderful resource that provides me the necessary knowledge, materials, and differentiation for every lesson."

"Students love the hands-on manipulatives. They are learning shapes, positions, and 3-dimensional shapes and using the vocabulary to describe what they learned."

"I am very pleased with this new math curriculum. It is very user friendly and my students really enjoy the lessons. I feel that they will be well prepared for kindergarten."