

BALTIMORE COUNTY PUBLIC SCHOOLS

DATE: March 11, 2008

TO: **BOARD OF EDUCATION**

FROM: Dr. Joe A. Hairston, Superintendent

SUBJECT: **CONSIDERATION OF THE KINDERGARTEN LANGUAGE ARTS
CURRICULUM AND KINDERGARTEN MATHEMATICS
CURRICULUM**

ORIGINATOR: Dr. Sonia Diaz, Chief Academic Officer

RESOURCE

PERSON(S): Dale R. Rauenzahn, Yvonne Barhight, Jean Wilson, Rex Shepard,
Heather Miller, George Newberry, and Pat Baltzley

RECOMMENDATION

That the Board of Education approve, as reviewed by the Board's Curriculum Committee, the Kindergarten Language Arts and Mathematics curriculum guides as directed by Policy 8130 and Policy 6000.

Attachment I – Audit Criteria

Attachment II – Executive Summary Packet for Kindergarten Language Arts

Attachment III – Executive Summary Packet for Kindergarten Mathematics

**Curriculum Management Audit Criteria
For Minimum Curriculum Guide Components and Specificity**

| Criteria | Description/(Abbreviation) |
|-----------------|---|
| One | <p>Clarity and Specificity of Objectives (O)</p> <ol style="list-style-type: none"> 0. No goals/objectives present 1. Vague delineation of goals/learner outcomes 2. States tasks to be performed or skills/concepts to be learned 3. States for each objective the what, when (sequence within course/grade), how actual standard is performed, and amount of time to be spent learning |
| Two | <p>Congruity of the Curriculum to the Assessment Process (A)</p> <ol style="list-style-type: none"> 0. No assessment approach 1. Some approach of assessment stated 2. States skill, knowledge, concepts which will be assessed 3. Each objective is keyed to district and/or state performance assessments |
| Three | <p>Delineation of the Prerequisite Essential Skills, Knowledge, and Attitudes (P)</p> <ol style="list-style-type: none"> 0. No mention of required skills 1. States prior general experience needed 2. States prior general experience needed in specified grade level 3. States specific documented prerequisite or description of discrete skills/concepts required prior to this learning (may be a scope and sequence across grades/courses if Pre-K – 12) |
| Four | <p>Delineation of the Major Instructional Resources (R)</p> <ol style="list-style-type: none"> 0. No mention of textbook or instructional tools/resources 1. Names the basic text/instructional resource(s) 2. Names the basic text/instructional resource(s) and supplementary materials to be used 3. States for each objective the “match” between the basic text/instructional resource(s) and curriculum objective |
| Five | <p>Clear Approaches for Classroom Use (S)</p> <ol style="list-style-type: none"> 0. No approaches cited for classroom use 1. Overall, vague statement on approaching the subject 2. Provides general suggestions on approaches 3. Provides specific examples on how to approach key concepts/skills in the classroom |

Each guide is rated from zero (0) to three (3) on each of the five criteria, with “3” representing the highest. To be considered adequate to effectively guide instruction, a guide must receive a total of 15 points.

Executive Summary

Revised Integrated Language Arts Kindergarten Curriculum Guide

February 2008

The Integrated Language Arts program for kindergarten is comprised of five seasonal binders: Beginning-of-the-Year, Fall, Winter, Spring, and End-of-the-Year. Together, these binders provide guidance and assistance to teachers in implementing a comprehensive language arts curriculum for students throughout the school year.

The kindergarten curriculum has been revised in response to the Phi Delta Kappa Curriculum Management Audit report presented to Board of Education of Baltimore County in February 2007. The kindergarten language arts curriculum received an overall rating of two points. Fifteen points was the highest attainable score. The auditors' score was derived by reviewing five criteria: Objectives, Assessment, Prerequisites, Resources, and Strategies. A rubric was provided by Phi Delta Kappa for each of the areas to explain how a maximum of three points could be achieved in each of the five criterion areas.

To determine the appropriate revisions necessary for strengthening, supplementing, and enhancing the kindergarten curriculum, the Phi Delta Kappa rubric was carefully reviewed and examined. Language Arts personnel participated in training on curriculum writing and assessment presented by Sue Shidaker, Phi Delta Kappa Audit Team member and co-author of *Managing Curriculum and Assessment: A Practitioner's Guide*. Ms. Shidaker also provided feedback regarding the existing kindergarten curriculum guide and proposed revisions.

The revised kindergarten curriculum guide now includes all the necessary components as identified in the rubric. Moreover, the curriculum guide includes other components that go beyond the expectations of the five criterion areas. The information below delineates specific revisions to the kindergarten guide in relation to each criterion.

Objectives (Criterion 1) in the kindergarten curriculum are clear and measurable. All lesson objectives are aligned to state and BCPS standards. Each lesson states the expectation for learning and how it will be demonstrated by the student. The amount of time to be spent learning has been identified. Weekly planners and daily lessons now include information for teachers about how lessons address the diverse learning styles and preferences of their students.

Assessment (Criterion 2) is present in a variety of forms in the kindergarten guides: formative assessments for each lesson, formative writing extensions, and literacy center activities that offer opportunities for teachers to assess the student's knowledge of skills, strategies, and content. The written, taught, and assessed curricula have been thoroughly reviewed to ensure direct alignment.

Prerequisites (Criterion 3) are the required skills and concepts needed prior to new learning. A scope and sequence has been added to the kindergarten curriculum guide that encompasses not only the grade before (Prekindergarten), but also Grade 1, allowing teachers to differentiate instruction as needed. A scope and sequence for social studies and for science also have been included in the kindergarten guide to support integrated content area instruction.

Resources (Criterion 4) are varied and extensive in the kindergarten curriculum and are aligned to the instructional objectives. The guide provides improved long-range, weekly, and daily planning documents that clearly specify the instructional materials for delivering an integrated language arts program. Specifically, planners identify weekly reading strategies, content-related vocabulary, lesson objectives, assessments, and new strategies for differentiation. Lesson resources and adapted materials for differentiation are to support implementation of the curriculum. Also provided are literacy center resources for children to use as they practice, apply, and extend essential early reading and writing skills.

Strategies (Criterion 5) for approaching key concepts and skills are included in the revised kindergarten guide. Higher level questioning has been incorporated into the lessons to provide additional rigor. Suggested strategies to provide extra support and challenge are more clearly delineated.

The revised integrated language arts program for kindergarten includes objectives, assessments, prerequisites, resources, and strategies that meet or exceed the highest standards on the Phi Delta Kappa curriculum rubric. This comprehensive and integrated guide provides teachers with all of the planning documents, daily lessons, differentiated materials, literacy center resources, and technology links for implementing rigorous skill and strategy instruction. Resources for parents also are provided to strengthen the home-school connection. The written, taught, and assessed curricula are aligned to ensure the highest-quality instructional program for kindergarten students in Baltimore County Public Schools.

Board of Education Curriculum Approval Form

| | | | | | | | |
|------------------------------|---|---|----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Course Name: | Kindergarten Language Arts | | | | Course #: | N/A | |
| Curriculum Name: | Integrated Language Arts Guide for Kindergarten - Beginning-of-the-Year, Fall, Winter, Spring and End-of-the-Year | | | | Curriculum Published Date: | 2005 - present | |
| Required Student Textbook: | N/A | | Copyright Date: | N/A | | Student Resources Required: | N/A |
| Grade Level of Curriculum: | <input type="checkbox"/> Pre-K | <input type="checkbox"/> 2 | <input type="checkbox"/> 5 | <input type="checkbox"/> 8 | <input type="checkbox"/> 11 | Level of Curriculum: | <input type="checkbox"/> AP |
| | <input checked="" type="checkbox"/> K | <input type="checkbox"/> 3 | <input type="checkbox"/> 6 | <input type="checkbox"/> 9 | <input type="checkbox"/> 12 | | <input type="checkbox"/> IB |
| | <input type="checkbox"/> I | <input type="checkbox"/> 4 | <input type="checkbox"/> 7 | <input type="checkbox"/> 10 | | | <input type="checkbox"/> GT |
| Curriculum Description: | The Integrated Language Arts program for kindergarten is comprised of five seasonal binders: Beginning-of-the-Year, Fall, Winter, Spring, and End-of-the-Year. Together, they provide guidance and assistance to teachers in implementing a comprehensive language arts curriculum for students throughout the school year. | | | | | | |
| PDK Audit Rating | | | | | | | |
| Curriculum Guide: | Criteria | | | | | Total Rating | |
| | Obj | Assess | Prereq | Res | Strat | | |
| Kindergarten Language Arts | 2 | 0 | 0 | 0 | 0 | 2 | |
| BCPS Response to PDK Rating: | New Rating | The following identifies specific revisions in response to the PDK audit criteria. | | | | | |
| | 3 | Criterion 1: Objectives The guides provide lesson objectives that are clear and measurable. Each lesson states the expectation for learning and how it will be demonstrated by the student. The amount of time to be spent learning is identified. All lesson objectives are aligned to state and BCPS standards. | | | | | |
| | 3 | Criterion 2: Assessment The guides provide formative assessments for each lesson, formative and summative writing extensions, and literacy center activities that offer opportunities to assess children's knowledge of skills, strategies, and content. All assessments align to state and BCPS standards. | | | | | |
| | 3 | Criterion 3: Prerequisites The guides provide a scope and sequence that identifies the necessary learning and skill development prior to, and following kindergarten. | | | | | |
| | 3 | Criterion 4: Resources The guides provide long-range and weekly planning documents. They clearly identify the instructional materials for delivering an integrated language arts program. Specifically, planners identify weekly reading strategies, content-related vocabulary, lesson objectives, assessments, and strategies for differentiation. Also included are varied and extensive resources to support implementation of the curriculum. These include detailed center materials for children to use as they practice, apply, and extend essential early literacy skills. | | | | | |
| 3 | Criterion 5: Strategies The guides provide specific examples of how to approach key concepts and skills in the classroom. Instructional strategies are differentiated to address the needs of all learners. Higher level questioning has been incorporated into the lessons while suggested strategies to provide extra support and challenge are delineated. | | | | | | |

| | | | | |
|--|--|---|---|--|
| | 15 | New Rating as a result of revisions to date. | | |
| Alignment (Attached AIM) | | Scope and Sequence (Attached) | | |
| <input checked="" type="checkbox"/> Voluntary State Curriculum | <input type="checkbox"/> National or Trades | <input type="checkbox"/> Across Subjects | <input checked="" type="checkbox"/> Prior Grade | |
| <input type="checkbox"/> Core Learning Goals | <input checked="" type="checkbox"/> State Standards | <input checked="" type="checkbox"/> Specific Grade | <input checked="" type="checkbox"/> Next Grade | |
| <input type="checkbox"/> College Board Standards | <input checked="" type="checkbox"/> BCPS Standards | | | |
| Professional Development/Implementation (Attached Plan) | | | | |
| <input type="checkbox"/> Pilot | | Date | | |
| <input checked="" type="checkbox"/> Roll-Out of Curriculum | Professional development for general and special education teachers | Date | August 2008 | |
| <input checked="" type="checkbox"/> On-going Staff Development | Continuing professional development for general and special education kindergarten teachers | Date | September, November 2008 January 2009 | |
| <input checked="" type="checkbox"/> New Teacher | New Teacher Academy, New Teacher Orientation | Date | August, December 2008 | |
| Assessments (Binder of all Assessments) | | | | |
| Type of Assessment | Number of Embedded | Number of assessTrax® | | |
| Short Cycles | N/A | N/A | | |
| Benchmarks | N/A | N/A | | |
| Final Exams | N/A | N/A | | |
| Performance | Formative assessments in lessons, formative and summative writing extensions, and literacy center activities | N/A | | |
| Other | MMSR, DIBELS, Primary Talent Development assessments | | | |
| Future Curriculum Review Process | | | | |
| <input type="checkbox"/> Review | | Date: | | |
| <input checked="" type="checkbox"/> Revise | Integrated Language Arts Guides for Kindergarten Spring and End-of-the-Year binders | Date: | March - June 2008 | |
| <input type="checkbox"/> Rewrite | | Date: | | |
| <input type="checkbox"/> Pilot | | Date: | | |
| Approvals | | | | |
| Humanities/STEM Assistant Superintendent | | Date: | | |
| Approval of Chief Academic Officer | | Date: | | |
| Approval of Superintendent | | Date: | | |
| Approval of Board of Education | | Date: | | |

Professional Development Plan Kindergarten 2008 - 2009

| Date | Time | Location | Presenters | # of Participants | Topic |
|---------|--------------------------------|----------|-----------------------------|--------------------|--|
| 8/20/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Bonnie Belsinger | 60 a.m. 60 p.m. | <ul style="list-style-type: none"> ○ New K guide planners (Extra Support, Challenge, Technology, Home Connection, etc.) ○ Integrated Language Arts Guide for Kindergarten - Beginning-of-the-Year ○ Open Court – Implementation/division of lessons ○ Beginning writing, daily message, writing strategies, fine motor, etc. ○ Teaching nonfiction and trade books to support language arts/content area instruction. |
| 8/20/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Jane Vanko | 60 a.m. 60 p.m. | Same as above |
| 8/20/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Carol Rahmaan Liz Carman | 60 a.m. 60 p.m. | Same as above |
| | | | | | |
| 9/29/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Bonnie Belsinger | 60 a.m. 60 p.m. | <ul style="list-style-type: none"> ○ Integrated Language Arts Guide for Kindergarten - Fall ○ Developing writing through multi-sensory strategies ○ Teaching nonfiction and trade books to support language arts/content area instruction. |
| 9/29/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Jane Vanko | 60 a.m. 60 p.m. | Same as above |
| 9/29/08 | 8:30 – 11:30 & 12:30 – 3:30 | Loyola | Carol Rahmaan Liz Carman | 60 a.m. 60 p.m. | Same as above |

| Date | Time | Location | Presenters | # of Participants | Topic |
|---|--------------------------------|---------------------------------|------------------|---------------------------------------|--|
| 11/5/08 11/6/08 11/7/08 11/10/08 11/11/08 11/12/08 | 8:30 – 11:30 & 12:30 – 3:30 | PD Lab | Bonnie Belsinger | 30 per each a.m. & p.m. session | <ul style="list-style-type: none"> ○ Maryland Model for School Readiness 2008 Updates ○ Completion and submission of 2008 MMSR Kindergarten Developmental Checklist ratings |
| 11/5/08 11/6/08 11/7/08 11/10/08 11/11/08 11/12/08 | 8:30 – 11:30 & 12:30 – 3:30 | TBD (close to the PD lab) | Jane Vanko | 30 per each a.m. & p.m. session | <ul style="list-style-type: none"> ○ Integrated Language Arts Guide for Kindergarten - Winter ○ Integrated Language Arts Guide for Kindergarten - Spring ○ Integrated Language Arts Guide for Kindergarten – End-of-Year ○ Teaching nonfiction and trade books to support language arts/content area instruction. |
| 1/26/09 | 8:30 – 11:30 & 12:30 – 3:30 | BCPS location | Bonnie Belsinger | 40 per each a.m. & p.m. session | <ul style="list-style-type: none"> ○ Using Data to Identify Interventions |
| 1/26/09 | 8:30 – 11:30 & 12:30 – 3:30 | BCPS location | Jane Vanko | 40 per each a.m. & p.m. session | <ul style="list-style-type: none"> ○ Taking It Higher – Differentiation for Early Readers ○ Developing Vocabulary to Support Language Arts and Content Area Instruction |

Executive Summary

Revised Kindergarten Mathematics Curriculum Guide

February 2008

The purpose of Kindergarten Mathematics Curriculum Guide (Guide) is to provide kindergarten teachers with the necessary framework to plan and implement a kindergarten mathematics program. The kindergarten program encompasses the use of *Every Day Counts Calendar Math* and *Investigations in Number, Data, and Space*, 2nd edition. The kindergarten mathematics program is designed to introduce the young child to the world of mathematics in a way that is developmentally appropriate and based on the latest research for how young children learn mathematics. It is aligned to the Voluntary State Curriculum and is designed to be an integral part of the PreK-12 mathematics program in meeting the county performance goal outlined in the *Blueprint for Progress* to help students meet state and county standards. It is also designed to help children to become confident mathematicians who understand mathematics, are effective problem solvers, can reason mathematically, and can communicate their understanding of mathematical concepts.

During the spring of 2007, the Guide was revised in response to the Phi Delta Kappa (PDK) Curriculum Audit report presented to the Board of Education of Baltimore County in February 2007. The kindergarten mathematics curriculum that was reviewed by the PDK auditors was written in 2006 as part of a new elementary mathematics program implemented in Grades K-5. This 2006 Guide received an overall rating of two points out of a total of fifteen points attainable. The auditor's score was derived by reviewing five criteria: Objectives, Assessment, Prerequisites, Resources, and Strategies. A rubric was provided by Phi Delta Kappa for each of the areas to explain how a maximum of three points could be achieved in each of the five criterion area.

The primary team from the Office of Mathematics PreK-12 reviewed the audit findings carefully to determine the areas of the kindergarten mathematics curriculum to be strengthened or supplemented. The revised Guide now includes all the necessary components as identified in the rubric. The following information outlines the revisions that were made to the Guide in relation to each criterion.

The Guide was rewritten to reference the revised mathematical emphases used as the daily objectives (Criterion 1) and to include time allotments for each unit. The Voluntary State Curriculum alignment for daily lesson objectives is now provided. The *Investigations in Number, Data, and Space* Curriculum Unit books are the main teaching tools that provide the sequence and objectives of the daily lessons. They also contain Guidelines for assessment, strategies for differentiating instruction, and professional development materials to support teaching. Differentiation strategies are provided for intervention, extension, and ELL throughout each unit.

The assessment (Criterion 2) process is clearly outlined for the kindergarten teachers in the "How to Use the Kindergarten Mathematics Guide" included in the Guide. Benchmarks/Expectations that measure student progress on the mathematical emphases of instruction are identified in each unit book beginning with the second unit of instruction. Assessment Checklists are provided with each unit for recording anecdotal notes and are used to determine which students need to complete an End-of-Unit Assessment interview. Assessment

is ongoing and is based primarily on teachers' observations of the students as they work. Teachers listen to the students' discussions and explanations of their ideas and strategies on a daily basis and examine their work as it evolves. The questions that are asked will help determine students' understanding of mathematics concepts. Samples of student work are also used to document and assess students' growth.

The revised Kindergarten Curriculum Planning Chart now includes a list for each *Investigations* unit of prerequisite skills (Criterion 3) that students have been exposed to if they have attended a BCPS prekindergarten program. A scope and sequence has been developed for PreK-12 mathematics, and the portion that identifies the skill development prior to and following kindergarten is included in the Guide.

A "How to Use the Kindergarten Mathematics Guide" section was developed and integrated into the Guide to provide teachers with an explanation of how to utilize the varied and extensive *Investigations* resources (Criterion 4) to teach the curriculum. A flowchart was developed as well to assist teachers with unit and daily planning. Also included in the revised Guide are: Options for a Full Day Schedule and Literacy/Numeracy Center Management Charts; Maryland Voluntary State Curriculum (VSC) alignment and monthly Focus Skills for the *Every Day Counts Calendar Math* program; Maryland Voluntary State Curriculum (VSC) alignment for implementing the *Investigations* program; and a Pacing Schedule and Curriculum Planning Chart.

The instructional strategies (Criterion 5) for developing mathematical concepts and key skills with the students are made more evident in the revised curriculum Guide. Each unit now includes Teacher Notes pertinent to the specific unit of instruction, including any Assessment Checklists contained in the unit. The second edition of the *Investigations* program provides a teacher-friendly layout and organization, capturing key mathematical ideas.

The changes made to the revised Guide reflect the attention paid to the rating for this Guide by the PDK auditors. In addition, the revisions reflect an alignment of the written, taught, and assessed curriculum, an expectation in Baltimore County that leads to a high-quality mathematics program for all students in Baltimore County Public Schools.

Board of Education Curriculum Approval Form

| | | | | | | | |
|------------------------------|--|--|--|---|--|-----------------------------|--|
| Course Name: | Mathematics Kindergarten | | | | Course #: | N/A | |
| Curriculum Name: | Kindergarten Mathematics | | | | Curriculum Published Date: | 2007 | |
| Required Student Textbook: | <i>Investigations in Number, Data, and Space</i> , Pearson Publishing (Tcher edition only) | | Copyright Date: | 2008 | | Student Resources Required: | None |
| Grade Level of Curriculum: | <input type="checkbox"/> Pre-K <input checked="" type="checkbox"/> K <input type="checkbox"/> I | <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 | <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 | <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 | <input type="checkbox"/> 11 <input type="checkbox"/> 12 | Level of Curriculum: | <input type="checkbox"/> AP <input type="checkbox"/> IB <input type="checkbox"/> GT <input type="checkbox"/> Honors |
| Curriculum Description: | This guide is designed to introduce the young child to the world of mathematics in a way that is developmentally appropriate and based on the latest research for how young children learn mathematics. The guide supports planning and implementation of the <i>Investigations</i> comprehensive kindergarten math program. | | | | | | |
| PDK Audit Rating | | | | | | | |
| Curriculum Guide: | Criteria | | | | | Total Rating | |
| | Obj | Assess | Prereq | Res | Strat | | |
| | 2 | 0 | 0 | 2 | 0 | 4 | |
| BCPS Response to PDK Rating: | New Rating | The curriculum guide has been revised during 2007-2008 based on the second edition of the <i>Investigations</i> program. The following identifies specific revisions in response to the PDK audit criteria. | | | | | |
| | 3 | Criterion 1: Objectives The guide was rewritten referencing the revised mathematical emphases used as the daily objectives and including time allotments for each unit. VSC alignment for daily lessons is provided. | | | | | |
| | 3 | Criterion 2: Assessments Assessment Checklists are now included in each unit. There are no formal written assessments; assessment is based on observations, anecdotal records, and samples of student work. There are end-of-unit assessments available for those students who are not accomplishing the skills of the unit. All assessments align to state and BCPS standards. | | | | | |
| | 3 | Criterion 3: Prerequisites The revised Kindergarten Curriculum Planning Chart now includes a list of prerequisite skills for each <i>Investigations</i> unit that students have been exposed to if they have attended a BCPS PreKindergarten program. A scope and sequence has been developed for PreK-12 mathematics, and the portion that identifies the skill development prior to and following kindergarten is included in the guide. | | | | | |
| | 3 | Criterion 4: Resources A "How to Use the Kindergarten Mathematics Guide" sheet was developed and integrated into the guide to provide teachers with an explanation of how to utilize the <i>Investigations</i> resources to teach the curriculum. A flowchart was developed to assist teachers planning. | | | | | |
| 3 | Criterion 5: Strategies The instructional strategies for developing mathematical concepts and key skills with the students were made more evident in the revised curriculum guide. Each unit now | | | | | | |

| | | | |
|--|--|---|---|
| | | includes Teacher Notes pertinent to the specific unit of instruction, including the Assessment Checklist contained in the unit. The second edition of the Investigations program provides a teacher-friendly layout and organization, capturing key mathematical ideas. | |
| | 15 | New Rating as a result of revisions to date | |
| Alignment (Attached AIM) | | Scope and Sequence (Attached) | |
| <input checked="" type="checkbox"/> Voluntary State Curriculum | <input type="checkbox"/> National or Trades | <input type="checkbox"/> Across Subjects | <input checked="" type="checkbox"/> Prior Grade |
| <input type="checkbox"/> Core Learning Goals | <input checked="" type="checkbox"/> State Standards | <input checked="" type="checkbox"/> Specific Grade | <input checked="" type="checkbox"/> Next Grade |
| <input type="checkbox"/> College Board Standards | <input checked="" type="checkbox"/> BCPS Standards | | |
| Professional Development/Implementation (Attached Plan) | | | |
| <input checked="" type="checkbox"/> Pilot | Training sessions provided for kindergarten teachers and administrators participating in the pilot for the textbook adoption | Date | Fall 2005 |
| <input checked="" type="checkbox"/> Roll-Out of Curriculum | Training sessions provided for administrators, teachers, special educators, ELL teachers, mentors, and STEM-RTs | Date | Spring 2006 Summer 2006 |
| <input checked="" type="checkbox"/> On-going Staff Development | Continuing professional development for administrators, teachers, special educators, ELL teachers, mentors, and STEM-RTs | Date | PSD 2006 Fall 2006 Spring 2007 Summer 2007 PSD 2007 |
| <input checked="" type="checkbox"/> New Teacher | New Teacher Academy, New Teacher Orientation | Date | Summer 2006 Summer 2007 |
| Assessments (Binder of all Assessments) | | | |
| Type of Assessment | Number of Embedded | Number of assessTrax® | |
| Short Cycles | N/A | N/A | |
| Benchmarks | N/A | N/A | |
| Final Exams | N/A | N/A | |
| Performance | Numeracy center activities | N/A | |
| Other | End-of-unit assessments (when applicable), teacher observation, anecdotal notes, and student work samples | N/A | |
| Future Curriculum Review Process | | | |
| <input checked="" type="checkbox"/> Review | To be reviewed on an annual basis as needed | Date: | 2008-2009 |
| <input type="checkbox"/> Revise | | Date: | |
| <input type="checkbox"/> Rewrite | | Date: | |
| <input type="checkbox"/> Pilot | | Date: | |
| Approvals | | | |
| Humanities/STEM Assistant Superintendent | | Date: | |
| Approval of Chief Academic Officer | | Date: | |
| Approval of Superintendent | | Date: | |
| Approval of Board of Education | | Date: | |

Professional Development/Implementation Plan
Kindergarten Mathematics
Investigations in Number, Data, and Space

| Type | Audience | Professional Development | Presenters | Dates |
|----------------------------|---|--|---|---|
| Pilot | Pilot kindergarten teachers and administrators | Pilot Training and Follow-up Support | Office of Mathematics PreK-12 and publishers | 8/05-12/05 |
| Roll-Out of Curriculum | Administrators | Elementary Mathematics Administrator Textbook Training | Office of Mathematics PreK-12 and publisher | 2/28/06 3/1/06 |
| Roll-Out of Curriculum | K teachers, special educators, ELL teachers, and mentors | Elementary Mathematics Textbook Round One Training | Office of Mathematics PreK-12 and publisher | 3/28/06 3/29/06 |
| Roll-Out of Curriculum | K teachers, special educators, ELL teachers, and mentors | Elementary Mathematics Textbook and Content Training Round Two | Office of Mathematics PreK-12 | 5/9/06 5/10/06 5/16/06 5/17/06 |
| Roll-Out of Curriculum | Principals (Rocky Gap) | The New Elementary Mathematics Textbook Program | Pat Baltzley Cindy Dennis | 6/20/06 |
| Roll-Out of Curriculum | Mentors | Updates on the New K-5 Elementary Mathematics Textbook Program | Cindy Dennis | 6/21/06 |
| New Teacher | New Teachers | New Teacher Academy | Office of Mathematics PreK-12 | Summer 2006 Summer 2007 |
| New Teacher | New Teachers | New Teacher Orientation | Office of Mathematics PreK-12 | 08/06 08/07 |
| On-going Staff Development | Administrators | Professional Study Day Preparation | Pat Baltzley Cindy Dennis | 8/06 |
| On-going Staff Development | K teachers, special educators, ELL teachers, mentors, and paraeducators | The New Elementary Mathematics Textbook Program (Professional Study Day) | Prepared by Office of Mathematics PreK-12 School-based presentation | 8/23/06 |

Professional Development/Implementation Plan
Kindergarten Mathematics
Investigations in Number, Data, and Space

| Type | Audience | Professional Development | Presenters | Dates |
|----------------------------|---|--|---|--------------------|
| On-going Staff Development | Site-based RTs and STEM RTs | KG <i>Investigations</i> Training | Karen Murray Debbi Zahn | 9/29/06 |
| On-going Staff Development | Principals | Implementation of New Elementary Mathematics Program | Pat Baltzley Cindy Dennis | 10/18/06 |
| On-going Staff Development | Administrators | Elementary Mathematics Administrators Textbook Training for <i>Investigations</i> 2008 | Office of Mathematics PreK-12 and publishers | 3/28/07 3/29/07 |
| On-going Staff Development | K teachers, special educators, ELL teachers, and mentors | Elementary Mathematics Teacher Training for <i>Investigations</i> 2008 | Office of Mathematics PreK-12 and publisher | 4/17/07 4/18/07 |
| On-going Staff Development | Principals (Rocky Gap) | Implementing <i>Investigations in Number, Data, and Space</i> | Pat Baltzley Cindy Dennis | 6/26/07 |
| On-going Staff Development | Mentors | Implementing <i>Investigations in Number, Data, and Space</i> | Cindy Dennis Rorrie Fortier | 6/27/07 |
| On-going Staff Development | Assistant Principals | Implementing <i>Investigations in Number, Data, and Space</i> | Cindy Dennis | 7/27/07 8/03/07 |
| On-going Staff Development | K teachers, special educators, ELL teachers, mentors, and paraeducators | Implementing <i>Investigations in Number, Data, and Space</i> (Professional Study Day) | Prepared by Office of Mathematics PreK-12 School-based presentation | 8/22/07 |

Articulated Instruction Module Objective List

Subject Area : Reading/English Language Arts
Course : READING KINDERGARTEN (0580000)

Baltimore County Public Schools
Report Date : 02/08/2008

Standard 1.0 General Reading Processes (Source : Voluntary State Curriculum)

O-1. Students will discriminate sounds and words.

- KSI-A Identify whether isolated sounds are the same or different.
- KSI-B Identify initial and final sounds in a word.
- KSI-C Categorize words as same or different by initial or final sounds.

O-2. Students will discriminate and produce rhyming words and alliteration.

- KSI-A Repeat and produce rhyming words.
- KSI-B Identify and repeat sentences that use alliteration.
- KSI-C Discriminate rhyming words from non-rhyming words.

O-3. Students will blend sounds and syllables to form words.

- KSI-A Orally blend syllables into a whole word, such as fun-ny = funny.
- KSI-B Orally blend onset and rimes (word families) into a whole word, such as b-at = bat.
- KSI-C Orally blend two to three phonemes into one-syllable words, such as m-e = me; f-u-n = fun.

O-4. Students will segment and manipulate sounds in spoken words and sentences.

- KSI-A Clap words in a sentence.
- KSI-B Clap and say syllables in a word.
- KSI-C Identify the initial sound in a word.
- KSI-D Segment individual sounds in words.
- KSI-E Substitute initial sounds in words to form new words.

O-5. Students will identify letters and corresponding sounds.

- KSI-A Identify in isolation, all upper and lower case letters of the alphabet.
- KSI-B Identify letters matched to sounds.
- KSI-C Produce the sounds associated with individual letters and letter patterns, such as s-, st-, -at, -ack, -ed.

O-6. Students will decode words in grade-level texts.

- KSI-A Identify similarities and differences in letters and words.
- KSI-B Blend letter sounds in C-V-C (consonant-vowel-consonant) words.
- KSI-C Use onset and rime (word families) to decode one-syllable words.

O-7. Students will engage in imitative reading, and read from familiar texts at an appropriate rate .

- KSI-A Recite nursery rhymes, poems, and finger plays with expression.
- KSI-B Read familiar texts (shared reading selections) with accuracy and expression.
- KSI-C Use knowledge of end punctuation to signal expression in reading.
- KSI-D Recognize some words by sight, such as student's first and last name, a, the, I, my, you, is, are.

O-8. Students will develop and apply vocabulary through exposure to a variety of texts.

- KSI-A Discuss words and word meanings daily as they are encountered in texts, instruction, and conversation.
- KSI-B Listen to and identify the meaning of new and content-specific vocabulary in multiple contexts.
- KSI-C Read signs, labels, and environmental print.

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O-9. Students will develop a conceptual understanding of new words.

- KSI-A Use words to describe location, size, color, and shape.
- KSI-B Name pictures of objects and common concepts such as emotions and actions.
- KSI-C Use and interpret signs and labels.
- KSI-D Identify and sort pictures of common words into basic categories.

O-10. Students will understand, acquire, and use new vocabulary.

- KSI-A Use text and illustrations to identify meaning of unknown words.
- KSI-B Use newly learned vocabulary on multiple occasions to reinforce meaning.
- KSI-C Use word structure (inflectional endings) to determine meaning of words.
- KSI-D Use resources, such as picture dictionaries, charts, diagrams, and posters to determine meaning of unknown words.

O-11. Students will demonstrate an understanding of concepts of print to determine how print is organized and read.

- KSI-A Identify the cover, title page, front and back of book, table of contents, page numbers, and describe what information is presented on the title and cover page.
- KSI-B Track print from left to right and top to bottom, including making a return sweep to the next line of text.
- KSI-C Match oral words to printed words.
- KSI-D Recognize that printed words are separated by spaces.
- KSI-E Recognize that letters build words and words build sentences.

O-12. Students will use strategies to prepare for reading and make meaning from text – Before and During Reading.

- KSI-A Make connections to the text using illustrations, photographs, and prior knowledge.
- KSI-B Make, adjust, and confirm predictions.
- KSI-C Use illustrations to construct meaning from text.
- KSI-D Make comments and ask relevant questions.
- KSI-E Relate events, characters, and actions in stories to life experiences.

O-13. Students will demonstrate understanding of text – After Reading.

- KSI-A Recall and discuss information from text.
- KSI-B Respond to questions (who, what, and where) and verify answers using illustrations/text.
- KSI-C Respond to text by drawing, speaking, dramatizing, or writing.
- KSI-D Compare information in text with prior knowledge.
- KSI-E Retell a story using text as support.

Standard 2.0 Comprehension of Informational Text - Students will read, comprehend, interpret, analyze, and evaluate informational text. (Source : Voluntary State Curriculum)

O-1. Students will develop comprehension skills by reading a variety of informational texts.

- KSI-A Listen to/read a variety of informational texts such as nonfiction trade books, picture dictionaries, simple maps, magazines, and multimedia resources.
- KSI-B Follow simple rebus directions and numbered steps for center activities, science investigations, recipes, and classroom schedules.
- KSI-C Identify and use text features such as bold print, print size, numbered steps, labels, photographs, charts, lists to facilitate understanding of informational texts.
- KSI-D Recognize text structure: sequential order, similarities and differences, and description.
- KSI-E Retell important facts from a text.

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Standard 3.0 Comprehension of Literary Text - Students will read, comprehend, interpret, analyze, and evaluate literary texts. (Source : Voluntary State Curriculum)

O-1. Students will develop comprehension skills by reading a variety of literary texts.

- KSI-A Listen to, and discuss a variety of different types of literary texts such as stories, poems, nursery rhymes, realistic fiction, and fairy tales.
- KSI-B Identify and explain how the title contributes to meaning.
- KSI-C Identify and explain how text features, such as illustrations, punctuation, and print features, contribute to meaning.
- KSI-D Identify the beginning, middle, and end of a story, including the problem and solutions.
- KSI-E Identify the characters, sequence of events, and setting of a story.

O-2. Students will use elements of poetry to facilitate understanding.

- KSI-A Identify rhyme, rhythm, and repetition in poems.
- KSI-B Retell the events of a poem.

O-3. Students will use elements of drama to facilitate understanding.

- KSI-A Identify the characters, dialogue, and scenery of a play.

O-4. Students will determine important ideas and messages in literary texts.

- KSI-A Retell the story by sequencing the main events.
- KSI-B Identify a personal connection to the text.

Standard 4.0 Writing - Students will compose in a variety of modes by developing content, employing specific forms, and selecting language appropriate for a particular audience and purpose. (Source : Voluntary State Curriculum)

O-1. Students will compose texts using the prewriting and drafting strategies of effective writers and speakers.

- KSI-A Generate ideas and topics for writing.
- KSI-B Dictate or write words, phrases, or sentences related to ideas or illustrations.

O-2. Students will compose oral, written, and visual presentations that express personal ideas and inform.

- KSI-A Write to express personal ideas using drawings, symbols, letters, or words.
- KSI-B Express ideas for contribution to a shared writing experience or topic of interest.
- KSI-C Use sensory details to expand ideas.
- KSI-D Dictate, draw, or write to inform.
- KSI-E Dictate, draw, or write a response to text, such as response logs and journals.

O-3. Students will compose texts using revising and editing strategies.

- KSI-A Prepare writing for display using rules, such as capital letters and periods.

O-4. Students will use effective word choices and details in writing.

- KSI-A Use words to communicate feelings.
- KSI-B Use newly acquired vocabulary.
- KSI-C Use descriptive words and other details to expand and improve writing.
- KSI-D Use word lists/resources (word walls, word banks, vocabulary charts, picture dictionaries) as a source of information in writing.

Standard 5.0 Controlling Language - Students will control language by applying the conventions of Standard English in speaking and writing. (Source : Voluntary State Curriculum)

O-1. Students will use grammar concepts and skills that strengthen oral language.

- KSI-A Use complete sentences in conversation and in responses to questions.

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O-2. Students will comprehend and apply standard English usage in oral language.

- KSI-A Use sentences with subject/verb agreement.
- KSI-B Use correct verb tense.
- KSI-C Use sentences with noun/pronoun agreement.
- KSI-D Use commonly confused words correctly, such as get/got, have/has.

O-3. Students will comprehend and use basic punctuation and capitalization in written language.

- KSI-A Use periods at the end of sentences.
- KSI-B Use capital letters for first letters of names and beginning sentences.

O-4. Students will apply conventional spelling in written language.

- KSI-A Spell first and last name correctly.
- KSI-B Spell a few high frequency words correctly.
- KSI-C Use letters to represent phonemes in words.
- KSI-D Use classroom resources such as, labeled objects, word walls, charts, and dictionaries to spell unknown words.

O-5. Students will produce writing that is legible to the audience.

- KSI-A Develop fine motor skills necessary to control and sustain handwriting.
- KSI-B Form upper case and lower case manuscript letters.

Standard 6.0 Listening - Students will demonstrate effective listening to learn, process, and analyze information. (Source : Voluntary State Curriculum)

O-1. Students will comprehend and analyze what is heard.

- KSI-A Recognize a speaker's general purpose.
- KSI-B Identify rhythms and patterns of language in songs, poems, and predictable texts.
- KSI-C Retell what is heard to demonstrate understanding.
- KSI-D Follow a set of two- or three-step directions.

Standard 7.0 Speaking - Student will communicate effectively in a variety of situations with different audiences, purposes, and formats. (Source : Voluntary State Curriculum)

O-1. Students will speak in a variety of settings in order to be understood.

- KSI-A Speak clearly enough to be heard and understood in a variety of settings.
- KSI-B Speak to inform.
- KSI-C Speak to relate experiences.
- KSI-D Retell or dramatize a story, using props.
- KSI-E Use props in situations such as show and tell.

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Objective List

Subject Area : Mathematics
Course : MATH KINDERGARTEN (0520000)

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Standard 1.0 Knowledge OF Algebra, Patterns, and Functions – Students will algebraically represent, model, analyze, or solve mathematical or real-world problems involving patterns or functional relationships (Source : Voluntary State Curriculum)

O-1. Students will identify, copy, describe, create, and extend non-numeric patterns.

KSI-A Represent kinesthetic patterns such as clap/snap/clap/snap.

KSI-B Identify and describe a repeating pattern.

KSI-C Identify the core of a repeating pattern.

KSI-D Represent and analyze repeating patterns using no more than 3 objects in the core of the pattern.

KSI-E Extend a repeating pattern.

Standard 2.0 Knowledge of Geometry – Students will apply the properties of one-, two-, or three-dimensional geometric figures to describe, reason, or solve problems about shape, size, position, or motion of objects. (Source : Voluntary State Curriculum)

O-1. Students will recognize and describe plane geometric figures.

KSI-A Sort and regroup plane geometric figures according to attributes such as: shape and size.

KSI-B Describe plane geometric figures and their attributes such as: shape and size.

KSI-C Identify triangles, circles, squares, and rectangles.

O-2. Students will recognize and describe solid geometric figures.

KSI-A Match, sort, and regroup solid geometric figures according to attributes.

KSI-B Describe solid geometric figures.

KSI-C Identify solid geometric figures in the environment.

O-3. Students will demonstrate a transformation.

KSI-A Describe position using words such as: over, under, above, on, next to, below, beside, behind.

KSI-B Demonstrate slides using simple objects.

Standard 3.0 Knowledge of Measurement - Students will identify attributes, units, or systems of measurements or apply a variety of techniques, formulas, tools, or technology for determining measurements. (Source : Voluntary State Curriculum)

O-1. Students will use measurement attributes.

KSI-A Compare objects by the attributes of length/height, weight, capacity.

KSI-B Order objects by the attributes of length/height, weight, capacity.

KSI-C Describe objects by the attributes of length/height, weight, capacity.

KSI-D Recognize time by identifying days of the week and by using terms such as: yesterday, today, tomorrow, morning, afternoon, night, before, after.

KSI-E Compare and describe temperature such as: temperature in January as compared to temperature in July.

O-2. Students will measure using non-standard units.

KSI-A Measure the length of objects using non-standard units.

KSI-B Measure the length of pictures of objects using non-standard units.

Standard 4.0 Knowledge of Statistics - Students will collect, organize, display, analyze, or interpret data to make decisions or predictions. (Source : Voluntary State Curriculum)

O-1. Students will read and interpret data displays.

KSI-A Compare and describe data from real graphs to answer a question.

KSI-B Compare and describe data from a picture graph to answer a question.

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Subject Area : Mathematics
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Standard 6.0 Knowledge of Number Relationships and Computation/Arithmetic - Students will describe, represent, or apply numbers or their relationships or will estimate or compute using mental strategies, paper/pencil or technology. (Source : Voluntary State Curriculum)

O-1. Students will represent and sequence numbers by applying knowledge of whole numbers and place value.

KSI-A Demonstrate counting to 31.

KSI-B Demonstrate counting backward from 10.

KSI-C Use ordinal numbers to indicate position such as: first, second, third, fourth, fifth.

O-2. Students will build sets 0 to 10 using concrete materials.

KSI-A Demonstrate counting to 10.

KSI-B Compare and describe quantities to indicate more than, less than, fewer than, as many as, one more, and one less.

KSI-C Count sets of a given quantity, 0 to 10.

KSI-D Demonstrate cardinality by answer of how many.

O-3. Students will match a numeral to a set. (0 to 10)

KSI-A Count and describe quantities 0 to 10.

KSI-B Recognize numerals 0 to 10.

KSI-C Identify and represent whole numbers up to 10 on a number line using manipulatives, symbols, and one-to-one correspondence.

O-4. Students will choose the coin (penny, nickel, dime) named from a given set of mixed coins and identify the value of the coin.

KSI-A Classify and sort coins by color and/or size.

KSI-B Describe coins.

KSI-C Identify penny, nickel, and dime by name.

KSI-D Name the value of a penny, a nickel, and a dime.

O-5. Students will model and describe addition and subtraction.

KSI-A Combine sets of concrete objects.

KSI-B Describe the result of combining sets of objects using pictures and words such as: and, add, plus, join, equal.

KSI-C Separate sets of concrete objects.

KSI-D Describe the results of separating sets of concrete objects using words and pictures.

KSI-E Model and name the value of the missing part in a part-part-whole situation using no more than 10 manipulatives.