

A Publication from the Maryland State Department of Education

Maryland Classroom

VSC Toolkit: mdk12.org

In fall 2003, when MSDE first sent a draft of the Voluntary State Curriculum (VSC) to schools for its pilot administration, teachers began commenting not only on its content and format but on what kind of support they would need to optimize its use.

By Teachers, For Teachers

Those comments begat the VSC Toolkit, a variety of online resources linked to Maryland's curricular indicators and objectives—resources intended to help teachers with both short-term and long-term instructional planning. (See **VSC Toolkit: Reading** and **VSC Toolkit: Math** for an overview of the resources available.)

But teachers and administrators didn't just suggest that a toolkit be built; they're its primary builders. Educators from all 24 school systems have been involved from the initial stages of development. In reading and math, for instance, more than 50 educators have helped create the tools, and another 150 have reviewed them, suggesting improvements and additions.

Toolkit Development

With the federal No Child Left Behind Act holding districts and schools accountable for students' performance in reading and math, MSDE decided that these two subjects would be the first tackled. By the time the State Board approved the reading and math VSC in the summer of 2004, their toolkits were already under development. (A social studies toolkit is being built now, and a science toolkit will be initiated once the science MSA—slated for its first full administration in 2007–08—is finalized.)

There are nearly 800 reading and math resources currently online. And yet the toolkit is far from complete. With hundreds of indicators and objectives in the VSC, and with nine different resources potentially linked to them, development will last at least a few more years.

By the time MSDE rolled out toolkits for reading and math, developers had already begun building resources for English, algebra/data analysis, biology, and government—courses comprising the Maryland High School Assessments. While those resources now consist of nearly 700 skill statements and public-release items (with annotated student work), developers soon plan to add clarifications and lesson seeds.

Work began immediately on courses subject to state tests—reading and math in elementary and middle school; algebra/data analysis, English, biology, and government in high school.

www.MarylandPublicSchools.org

Are We There Yet?

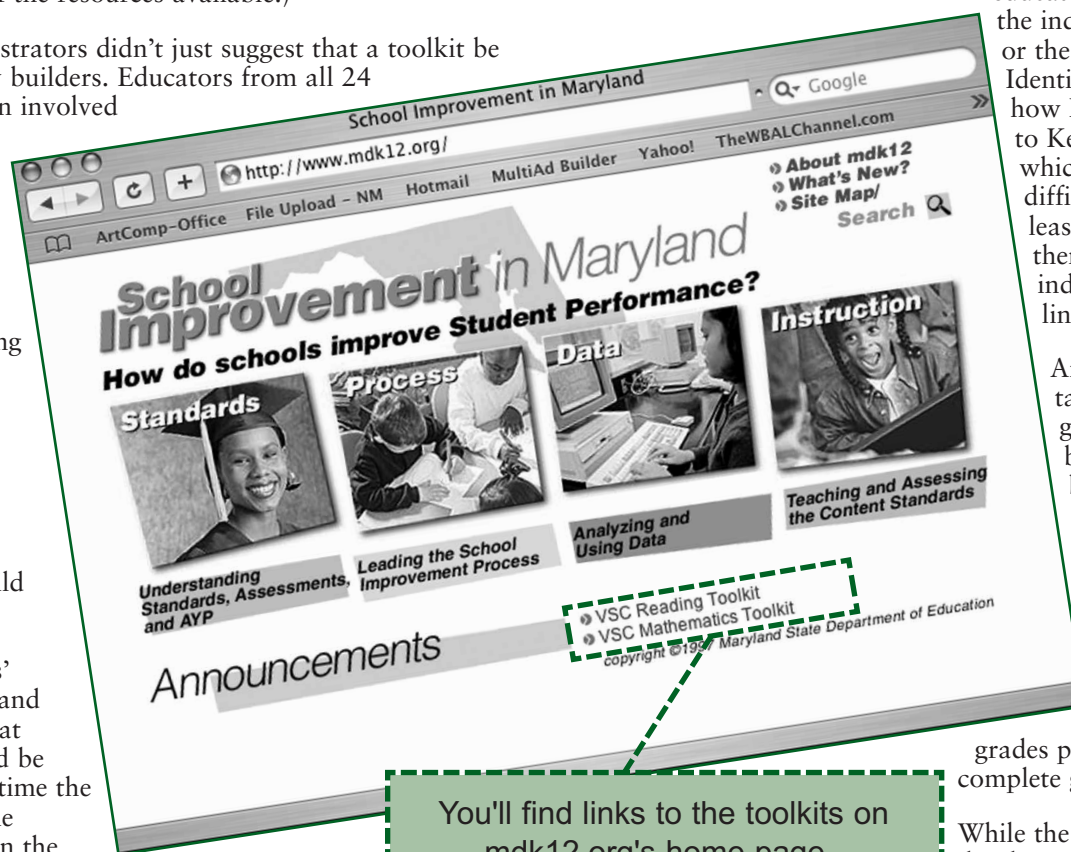
Many users say the toolkit's evolving nature is one of its more exciting aspects. Terri Lokey, an instructional support teacher at Kenmore Elementary in Cecil County, says she encourages teachers to visit the toolkit frequently, precisely because it grows so quickly. "I'm surprised at how many resources are there one day that weren't there the day before."

And while development will continue for quite some time, it won't progress linearly (e.g., Standard 1/Topic A/Objective 1/Indicator a). From the start, developers decided to first address the sections

educators said they needed most—the indicators they find confusing or the objectives they avoid. Identifying priority needs is also how Lokey introduces the toolkit to Kenmore's teachers. "I ask which indicators they find most difficult or which they teach the least—or the least well." She then takes them to those indicators and reviews the linked resources.

And just as standards aren't tackled in order, neither are grades. Toolkit development began with grades 3–8, because that's when reading and math performance is tested. However, teachers at all grade levels have made it clear that the early elementary years need attention, and so developers have committed to building out grades preK–2—even before they complete grades 3–8.

While the sequence and scope of development isn't always certain, the unabated pace of that development is, for Dr. Grasmick has made the VSC Toolkit a funding priority.



You'll find links to the toolkits on mdk12.org's home page.

Continued on page 4

VSC Toolkit: Reading

Clarifications are detailed explanations of indicators that address each objective embedded in them. Clarifications focus on the building of reading skills and their dependency upon each other.

Public Release Items have appeared on MSA forms and are then released for public viewing and use. Releasing items is one step to ensuring that schools, districts, and other stakeholders understand how the MSA assesses Maryland's content standards.

Lesson Seeds, found at the objective level, are ideas for lessons. Each seed is directly aligned with an objective and ranges in cognitive demand. Teachers may use the entire seed or only a portion of a seed based upon the capability of their classes.

Sample Assessments, found at the objective level, contain three components: 1) passage; 2) brief constructed-response question (BCR) written to that objective; and 3) annotated student responses. Each BCR has been field-tested by a group of students, and some of their responses have been annotated. While the format for these BCRs is the same format used on the MSA, these sample assessments have not appeared on an actual MSA.

VSC Toolkit: Math

Most tools in the math toolkit are embedded at the objective level. Nine types of tools are under development; however, not all tools are currently available for every objective.

Clarifications explain an indicator or objective so that teachers better understand the skills and/or concepts in question.

Lesson Plans have been juried by Maryland educators and may be adapted for students' needs when teaching various concepts.

Lesson Seeds are ideas related to the indicator or objective that teachers may use to build a lesson. Lesson seeds are not meant to be all-inclusive, nor are they substitutes for instruction.

Sample Assessments give teachers an idea of how a Maryland School Assessment (MSA) item might be presented. The items appropriately measure the content of the VSC and may be formatted similarly to those appearing on the MSA; however, these are sample items only and have not appeared on an MSA form.

Prerequisite Skills describe the knowledge or skills a student must have before working on the concept in question.

Higher Order Thinking Skills are examples of questions, at various levels of cognitive demand, related to the concept in question.

Technology suggests ways that technology may be used to enhance the teaching of the concept in question.

Resources link teachers to Web sites that offer instructional resources.

Public Release Items have appeared on MSA forms and are released for public viewing and use. Releasing items is one step to ensuring that schools, districts, and other stakeholders understand how the MSA assesses Maryland's content standards.

Using the Toolkit

Clearly, the VSC Toolkit's popularity is growing. From January to August 2006, all the toolkits combined—reading, math, English, algebra/data analysis, biology, and government—logged nearly 38,000 page views. (Over those same months, the VSC itself was viewed more than 1.7 million times.)

Tara Mattingly, an instructional specialist at J.C. Parks Elementary in Charles County, says that as the toolkit becomes more and more populated with resources, teachers are becoming increasingly aware of it and are using it more often and in more depth. "Teachers get excited when they look at an indicator and linked to it is a clarification and a higher order thinking skill and a lesson seed and an assessment—because then they can see the whole picture and how it might translate in the classroom."

MSDE anticipates that easier online navigation to the toolkit will also attract more users. Links to the reading and math toolkits are now featured prominently on the School Improvement in Maryland home page: mdk12.org.

"Some teachers say, 'I want you to print out everything [in the toolkit] for me.' But I want them to get used to going to the site themselves and practice using it on their own."

I want them to see that the toolkit is always evolving and always growing. I want them to get used to having it as a resource that's right there next to them when they're struggling with a concept or when we're doing team planning."

—Terri Lokey

**Instructional Support Teacher
Kenmore Elementary School**

Toolkits for the HSA subjects are at mdk12.org/instruction/index.html (under Teaching and Learning).

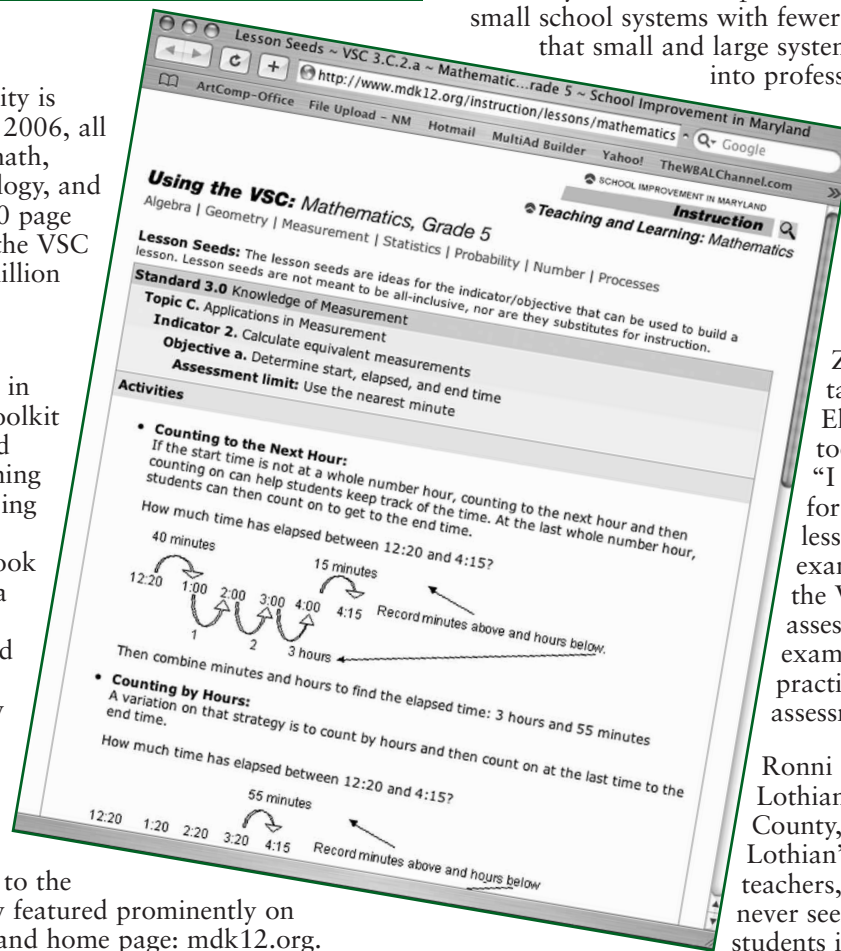
Dixie Stack, MSDE's director of curriculum, says the toolkit is designed to give teachers all the integral pieces they need to teach content, but that it's up to teachers themselves to put those pieces together, in a way that will meet their students' individual needs. While other states have resources similar to the VSC Toolkit, Stack says that the way this one is organized—with each tool electronically linked to its related indicator or objective—is unique to Maryland.

Stack says she's not surprised to see the toolkit used extensively in small school systems with fewer curricular resources. But she adds that small and large systems alike seem to be incorporating it into professional development.

Lokey says the toolkit not only helps teachers organize their thinking; it helps her organize her own. It also helps her identify gaps in instruction—areas in which teachers aren't confident or aren't spending sufficient time.

Zachary Wynkoop, who last year taught 5th grade at Mary H. Matula Elementary in Charles County, used the toolkit mostly to plan his math lessons. "I used the lesson seeds to spark ideas for preparing my daily and weekly lessons. The seeds gave me excellent examples that correspond directly with the VSC. I also used the sample assessments to help create classroom examples for guided and independent practice, homework, and other formal assessments, like quizzes and BCRs."

Ronni Cantor, a reading resource teacher at Lothian Elementary School in Anne Arundel County, uses the toolkit not just with Lothian's teachers but with prospective teachers, too—some of whom, she says, have never seen the VSC. These teacher candidates—students in her reading acquisition, instruction, and assessment courses at the University of Maryland, Baltimore County—"are so grateful to have experience not just with the curriculum, but with a collection of resources that will help them deliver it more effectively."



Maryland Classroom

A Publication from the Maryland State Department of Education

Office of Academic Policy

Ronald Peiffer, Deputy State Superintendent
Nan Mulqueen, Editor-in-Chief

Edward L. Root, President, State Board of Education

Nancy S. Grasmick, Secretary-Treasurer of the Board
State Superintendent of Schools

Martin J. O'Malley, Governor

The Maryland State Department of Education does not discriminate on the basis of race, color, sex, age, national origin, religion, or disability in matters affecting employment or in providing access to programs. For inquiries related to departmental policy, contact the Equity Assurance and Compliance Branch, Maryland State Department of Education, 200 West Baltimore Street, Baltimore, Maryland 21201-2595, Phone: 410.767.0433, TTY/TDD: 410.333.6442, Fax: 410.767.0431.

If you have any questions or comments about this publication, please contact Nan Mulqueen, editor, at 410.767.0475.

"[The toolkit] has incredible potential—especially in school systems where professional development is a high priority, is strong, and is consistently and strategically delivered."

We're here to provide kids with good instruction, and the toolkit gives us a wonderful map to do that."

—Ronni Cantor

**Reading Resource Teacher
Lothian Elementary School**

Sample Assessments & Public Release Items

“The sample assessments helped me develop a knowledge base for how questions will be phrased on the MSA, while also clarifying the VSC’s indicators and assessment limits. Moreover, it helped me become more proficient in creating my own questions and examples. It is a very strong model that is easy to use.”

—Zachary Wynkoop

“[Teachers in my school] will use the assessment items in the classroom themselves, and bring their own students’ work back to the group to compare against the on-site anchor papers. They’ll ask, ‘Why did they score it this way?’ But the annotated answers help them see student work in context and figure out where their students are—and aren’t—hitting the mark.”

—Tara Mattingly

Using the VSC: Reading/ELA, Grade 5
Reading/ELA | Informational | LITERARY | Writing | Language | Listening | Speaking

Public Release Items: Public release items have appeared on MSA forms and then are released for public viewing and use. Releasing items is one step to ensuring that schools, districts, and other stakeholders understand how the content standards are assessed on the MSA.

Standard 3.0 Comprehension of Literary Text
Indicator 3. Analyze elements of narrative texts to facilitate understanding and interpretation.
Objective a. Analyze characterization

Selected Response Item
Read the story ‘Strongest of All’ and answer the following question.
How did Rabbit get Elephant and Whale to help him?

A. He made them laugh.
B. He promised to do them a favor in return.
C. He said nice things to them.
D. He said he would give them a gift.

Correct Answer: B

Strongest of All
By Pleasant DeSpain

One day long ago, clever Rabbit was walking along the seashore. Hearing voices, he stopped to listen. Elephant and Whale were having a conversation. He wanted to hear every word.

“Sister Whale,” said Elephant, “you are the strongest, and most beautiful animal of the sea. Naturally, I’m the largest, strongest, and most beautiful animal on the land. We two should rule over all the animals, birds, and fish on the earth.”

“Yes, it’s true, Brother Elephant,” said Whale. “We are the greatest. You should rule the land. I’ll be happy to be your subject.”

Using the VSC: Mathematics, Grade 8
Algebra | Geometry | Measurement | STATISTICS | Probability | Number | Processes

Sample Assessments: Each sample assessment item gives an idea of how an assessment item on the MSA might be presented. The items appropriately measure the content of the VSC and may be used for practice. However, these are sample items only and have not appeared on any MSA form.

Standard 4.0 Knowledge of Statistics
Indicator 1. Organize and display data
Objective a. Organize and display data to make circle graphs
Assessment limit: Use no more than 5 categories with data in whole number percents

Selected Response Item
Joey wants to make a circle graph that displays the data in the table below.

Type of Vehicle	Percent
Van	25
Sedan	17
SUV	31
Station Wagon	15
Sports Car	12

What will be the angle measure, in whole degrees, for the section that represents Station Wagon?

A. 18°
B. 54°
C. 65°
D. 72°

Correct Answer: B

Using the VSC: Mathematics, Grade 3
Algebra | Geometry | Measurement | Statistics | Probability | Number | Processes

Higher Order Thinking Skills: The higher order thinking skills shows examples of questions for this concept at various levels of cognitive demand.

Standard 5.0 Knowledge of Probability
Topic B. Theoretical Probability
Indicator 1. Identify the probability of one simple event
Objective a. Describe the probability of an event using words
Assessment limit: Use probability terms of more (or most) likely, less (or least) likely, or equally likely

Using a game using this spinner. The spinner is divided into 6 equal sections.

Level 1: Knowledge/Comprehension

- Is it equally likely that the spinner will land on either color?
- On which color is the spinner most likely to land?
- On which color is the spinner least likely to land?

Level 2: Application/Analysis

- How should Sarah change the spinner to make landing on either color equally likely?
- The last five times Sarah spun, she landed on blue. On which color is Sarah most likely to land the next time she spins?

Level 3: Synthesis/Evaluation

- On which color is the spinner most likely to land? Explain why.
- Explain how Sarah could change the spinner so that it is twice as likely to land on the blue color as the pink color.
- Sarah is going to add another color to the spinner. Explain how Sarah could change the spinner to make landing on any of the three colors equally likely.

Higher Order Thinking Skills

“Higher order thinking skills are great for getting teachers out of a rut that’s easy to fall into: asking the same questions over and over—questions that are often at the lowest level of cognitive demand.”

—Tara Mattingly

Using the VSC: Reading/ELA, Grade 7
Reading/ELA | Informational | Literary | Writing | Language | Listening | Speaking

Lesson Seeds: The lesson seeds are ideas for the indicator/objective that can be used to build a lesson. Lesson seeds are not meant to be all-inclusive, nor are they substitutes for instruction.

Standard 3.0 Comprehension of Literary Text
Indicator 3. Analyze elements of narrative texts to facilitate understanding and interpretation
Objective b. Analyze the conflict and the events of the plot

Activities
Students will read a short narrative text. After reading, students will be given a narrative map that lists all plot elements. Together teacher and students will complete the narrative map. Next students will be directed to delete or cover from sight the conflict information. Finally students will list all the changes that removal of the conflict causes within the plot. Students might then categorize these changes by impact on character, setting, theme, etc... or create a list from greatest to least impact on the plot.

Narrative Map

Exposition
Rising Action
Conflict
Climax
Falling Action
Resolution

The teacher and students will read a short narrative text and then list each decision made by a character on a Decision-Making Diagram. This will allow students to see the relationship between a character’s decision and the effect of that decision on the plot. Students will need to know what character’s decision is, who made it, and why the decision was made, listing positive and negative effects for the decision-maker and other characters. Then each decision should be placed in the time order of the story to determine whether each decision stands alone or served as a cause for other decisions.

Decision-Making Diagram

Decision #
Who?
What?
Why?
Positive Impact

Lesson Seeds

“Teachers would probably say the lesson seeds are most helpful to them, because they can often take the seeds right from the toolkit and use them immediately in their classroom—with few modifications.”

—Terri Lokey

“The lesson seeds are great for teachers who need new ideas for delivering content. Teachers will sometimes use them with a small group of students, rather than with the whole class, as a way to differentiate instruction.”

—Tara Mattingly

Using the VSC: Mathematics, Grade 7
Algebra | Geometry | Measurement | Statistics | PROBABILITY | Number | Processes

Clarifications: Each clarification provides an explanation of the indicator/objective to help teachers better understand the skills and/or concepts.

Standard 2.0 Comprehension of Informational Text
Indicator 4. Analyze important ideas and messages in informational texts

Clarification
To show understanding of the skills stated in this indicator, a reader will express an understanding of the text, which are the important ideas and messages. These ideas and messages are stated in the text, but for more complex texts, a reader will determine the important ideas and messages by synthesizing ideas across the text(s).

Classroom Example 1
What is the total number of outcomes for the two spinners shown below?

This question can be solved using one of several methods shown below.

Method 1
Make a list of all possible outcomes for each spinner.

1, A	2, A	3, A	4, A
1, B	2, B	3, B	4, B
1, C	2, C	3, C	4, C

Answers: 12 possible outcomes

Method 2
Make a tree diagram showing each possibility.

Using the VSC: Reading/ELA, Grade 8
Reading/ELA | INFORMATIONAL | Literary | Writing | Language | Listening | Speaking

Clarifications: Each clarification provides an explanation of an indicator/objective to help teachers better understand the skills and/or concepts.

Standard 2.0 Comprehension of Informational Text
Indicator 4. Analyze important ideas and messages in informational texts

Clarification
To show understanding of the skills stated in this indicator, a reader will express an understanding of the text, which are the important ideas and messages. These ideas and messages are stated in the text, but for more complex texts, a reader will determine the important ideas and messages by synthesizing ideas across the text(s).

Classroom Example 1
The author’s purpose, he or she can speculate as to how the author’s purpose, either implied or directly stated, is the author’s intended purpose. Authors write to inform, persuade, or to express personal ideas or opinions. Authors write for different audiences; an author’s intended audience is the intended audience for a text helps a reader determine the author’s purpose, he or she can speculate as to how the author’s purpose, either implied or directly stated, is the author’s intended purpose. Authors write to inform, persuade, or to express personal ideas or opinions. Authors write for different audiences; an author’s intended audience is the intended audience for a text helps a reader determine the author’s purpose, he or she can speculate as to how the author’s purpose, either implied or directly stated, is the author’s intended purpose.

Clarifications

As someone who’s been an educator for 28 years, and who has been immersed in the literature on reading research and instruction over the past decade, I know there are still some concepts that aren’t second-nature. And I wonder how I could possibly teach those concepts to teachers—and how teachers could, in turn, teach them to students—if I’m not absolutely sure I’m clear on the indicator’s meaning and intent.

—Ronni Cantor

When I sit down with teachers and go through the clarifications, it’s almost like a crash course in reading instruction.

—Terri Lokey

“I can’t say which tools are most useful. They’re all useful because usefulness ultimately depends on what each teacher needs.”

—Tara Mattingly