Mississippi Department of Education

Common Core State Standards (CCSS) and Assessments Update
Grades 9 - 12 Training of the Trainers
Mathematics and ELA

July 2012

Mississippi Board of Education

Vision

To create a world-class education system that gives students the knowledge and skills that will allow them to be successful in college and the workforce and flourish as parents and citizens.

Mission

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community.

Goal 1

To mobilize resources and supports to help ensure that all students exit Third Grade reading on grade level by 2020.

Goal 2

To reduce the dropout rate to 13% by 2013.

Goal 3

To reach the national average on national assessments by 2013.

Five Strategies to Accomplish Goals

Strategy 1	Strategy 2	Strategy 3	Strategy 4	Strategy 5
Implement ongoing, comprehensive reform in the areas of instruction, curriculum, assessment design and accountability systems for all grade levels, from early education through graduation.	Increase the quantity and quality of teachers.	Increase the quantity and quality of administrators.	Create a culture in Mississippi that understands the value of education.	Redesign education for the 21st Century workforce in Mississippi.

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What is the CCSS Initiative?

- An initiative of the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO)

- A significant and historic opportunity for states collectively to develop and adopt a core set of academic standards in Mathematics and English/Language Arts

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The Common Core State Standards Initiative

- Beginning in the spring of 2009, Governors and state commissioners of education from 48 states, 2 territories and the District of Columbia committed to developing a common core of rigorous state K-12 standards.
- In June 2010, the final Common Core State Standards (CCSS) were released by NGA and CCSSO.
- To date, 46 states and the District of Columbia have adopted the Standards. **(Mississippi adopted the CCSS in August 2010.)**
- Most states intend to fully implement the new standards by the 2014-15 school year.

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What are the Common Core State Standards (CCSS)?

- Fewer, clearer, and higher
- Aligned with **college and work expectations**
- Rigorous content requiring **higher-order thinking** and **application of knowledge**
- **Internationally benchmarked**
- Evidence-and/or research-based

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Why is this initiative important?

- Provides **consistency** across states
- Allows for **equal access**
- Prepares students to **compete globally**
- Allows for more **focused professional development**
- Allows for the development of a **common assessment**
- Provides the opportunity to **compare and evaluate** policies that affect student achievement **across states**

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Key Advances in the Common Core ELA/Literacy Standards

Reading

- Balance of literature and informational texts
- Focus on text complexity and what students read

Writing

- Emphasis on argument and informative/explanatory writing
- Writing about sources (evidence)

Speaking and Listening

- Inclusion of formal and informal talk

Language

- Stress on academic and domain-specific vocabulary

Address reading and writing across the curriculum

- Responsibility of teachers in those subjects
- Complement rather than replace content standards in those subjects

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Key Advances in the Common Core Math Standards

Focus and coherence

- Focus on key topics at each grade level
- Coherent progressions across grade levels

Depth over breadth

- Allows more time for mastery

Balance of concepts and skills

- Content standards require both conceptual understanding and procedural fluency

Mathematical practices

- Foster reasoning, modeling, and sense-making in mathematics

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Shift from *"What's Taught"* to *"What Students Need to Be Able to Do"*

To succeed in 21st century college and careers, students need to be able to:

1. ***Solve problems***
2. ***Manage oneself***
3. ***Adapt to change***
4. ***Analyze/conceptualize***
5. ***Reflect on / improve performance***
6. ***Communicate***
7. ***Work in teams***
8. ***Create / innovate / critique***

9. ***Engage in learning throughout life***

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Instructional Delivery System

At a minimum, to successfully implement Common Core State Standards and Assessments, TEACHERS must:

1.Know how to **plan intentionally** for rigorous and deep learning experiences.

2.Know how to **design and utilize formative assessment** that ensures retention and the ability to apply learning.

3.Be able to **create a learning environment** that fosters deep thinking, engagement of students, integration of subject areas, and problem-based learning experiences.

4.Be able to **analyze and use a variety of data** to drive instructional practice.

5.Embrace **continuous professional learning.**

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Importance of School Leadership

School leaders should:

1. Be proactive to remain informed about CCSS and PARCC.
2. Be able to succinctly discuss key points about CCSS.
3. Communicate with key individuals at the local level.
4. Engage parents in discussion about CCSS.
5. Focus on engaging instruction aligned to CCSS, as the assessments are a changing dynamic.
6. Build staff/student capacity, as students must be able to think, process, write, argue, and defend their views.
7. Share issues and concerns with the MDE.

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What is not included in the CCSS?

- How teachers should teach
- All that can or should be taught
- Intervention strategies to support students
- The full range of support appropriate for English Language Learners and for students with special needs
- Textbooks to help with implementation

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Mathematics Alignment Example

CCSS Math **8th Grade**

Functions Domain

CCSS Page 55, 8.F.5

Describe qualitatively the functional relationship between two quantities by analyzing a graph. Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

MS Math **Algebra II**

Geometry Strand

Competency 3 Objective b

Classify functions based on sketches of their graphs. (DOK 2)

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Mathematics Alignment Example

CCSS Math G-GPE.5

Conceptual Category: *Geometry*

Domain: *Expressing Geometric Properties with Equations*

CCSS Page: *78*

Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).

MS MMF Algebra I

Strand: *Geometry*

Competency: *3* Objective: *a*

Apply the concept of slope to determine if lines in a plane are parallel or perpendicular. (DOK 2)

MS MMF Geometry

Strand: *Algebra*

Competency: *2* Objective: *c*

Use slope to analyze and write equations for parallel and perpendicular lines. (DOK 2)

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Mathematics Alignment Example

CCSS Math F-TF.3

Conceptual Category: *Functions*

Domain: *Trigonometric Functions*

CCSS Page: *71*

(+) **Use** special triangles to **determine geometrically** the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x, where x is any real number.

MS MMF Geometry

Strand: *Measurement*

Competency: *4* Objective: *d*

Explain and use the properties of 45-45-90 and 30-60-90 triangles. (DOK 2)

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Mathematics Alignment Example

CCSS Math A-APR.4

Conceptual Category: *Algebra*

Domain: *Arithmetic with Polynomials and Rational Expressions*

CCSS Page: *64*

Prove polynomial identities and use them to describe numerical relationships. *For example, the polynomial identity* $(x^2 + y^2)^2 = (x^2 – y^2)^2 + (2xy)^2$ *can be used to generate Pythagorean triples.*

MS MMF

There is no MS MMF objective focusing on polynomial identities.

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Alignment of CCSS for Math and MS Math Framework

- Overall alignment is **not** good
- Many specifics in the CCSS are addressed in the MS Math Framework but at a lower grade level(s)
- Several of the MS Math Framework objectives are not mentioned in the Common Core
- CCSS for Math are more rigorous than the MS Math Framework

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Common Core Secondary Mathematics

- Solid foundation for grades 6-8 in Geometry, Algebra, Probability, and Statistics
- Traditional Pathway consisting of CCSS Algebra I, Geometry, Algebra II with some data, probability and statistics included in each course.
- 8th grade CCSS Algebra I is a compacted version in which students would complete the content of 7th grade, 8th grade, and the high school Algebra I course in grades 7 and 8.

See Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards.

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ELA Alignment Example

CCSS ELA Grades 9-10

Literature: Key Ideas and Details

CCSS Page 38, RI.9-10.1

Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

MS ELA Grade 9

Competency 2

Objective c

The student will comprehend, respond to, interpret, or evaluate a variety of texts of increasing length difficulty, and complexity.

c. The student will make inferences based on textual evidence of details, organization, and language to predict, draw conclusions, or determine author's purpose.

(DOK 3)

ELA Alignment Example

CCSS ELA Grades 9-10

Writing: Text Types and Purposes

CCSS Page 45, W.9-10.2

Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through effective selection, organization, and analysis of content.

MS ELA Grade 10

Competency 3

Objective c

The student will produce, analyze, and evaluate effective communication.

c. The student will compose responses to literature, position papers, and expository essays in the informative mode clearly expressing a main idea thoroughly developed by relevant supporting details, which are all well elaborated and sufficient in number. (DOK 3)

ELA Alignment Example

CCSS ELA Grades 11-12

Language: Knowledge of Language

CCSS Page 54, L.11-12.3

Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
A.Vary syntax for effect, consulting references (e.g., Tufte's Artful Sentences) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.

MS ELA Grade 11

Competency 4

Objective c

The student will analyze advanced sentence structure in multiple texts in composing or editing to achieve a purpose. (DOK 3).

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Alignment of CCSS English Language Arts (ELA) and MS ELA

- Overall alignment **is** good
- Few specifics in the Common Core are not addressed in the MS ELA Framework or not addressed at the same grade level
- Many of the MS ELA Framework objectives and sub-objectives are not mentioned in the Common Core
- Rigor is comparable

Common Core Assessment Proposals

Two Comprehensive Assessment Proposals through RttT Funding:

- Partnership for Assessment of Readiness for College and Careers **(PARCC)**

- SMARTER Balanced Assessment Consortium **(SBAC)**

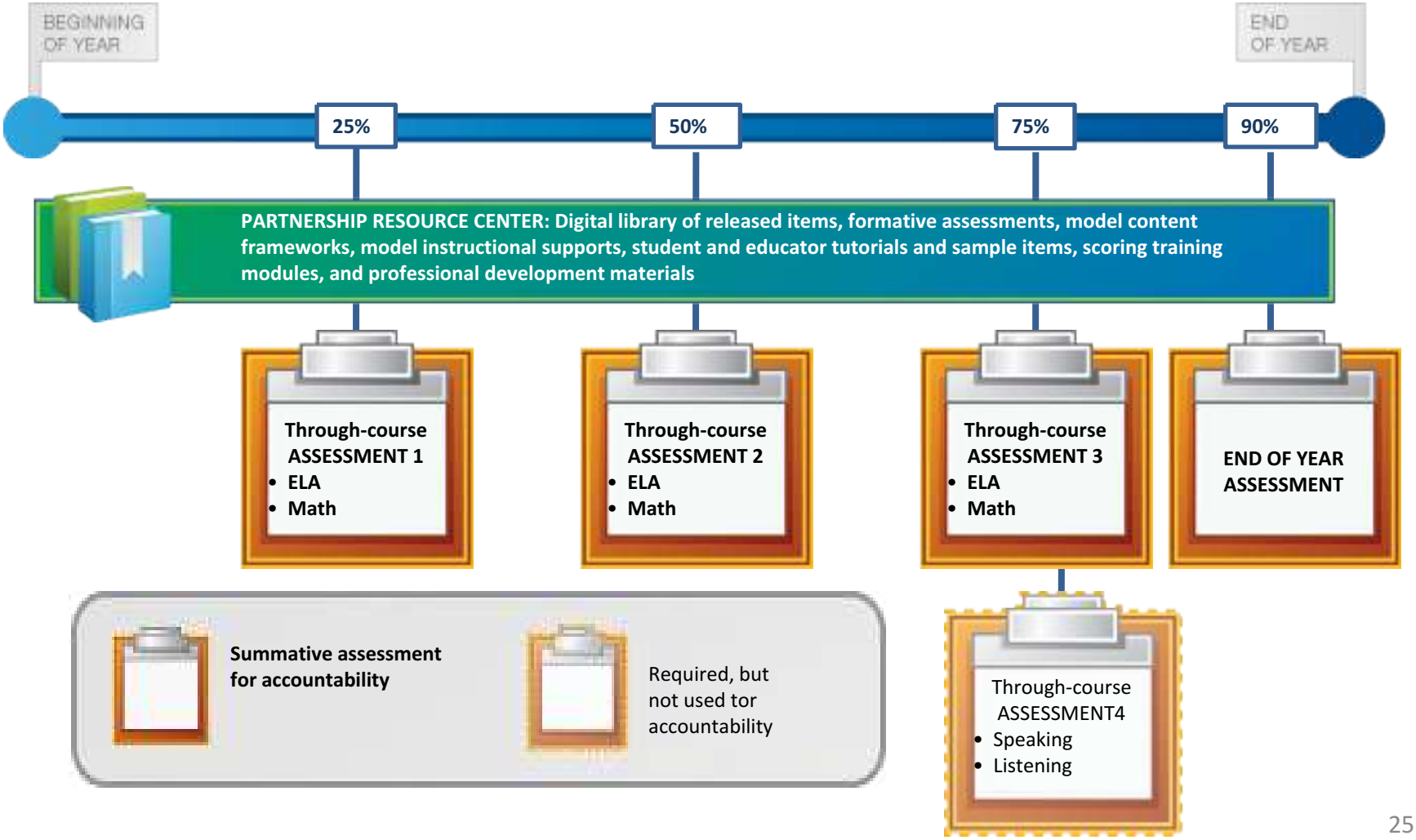
New Consortia tests will replace current state NCLB tests in **2014-2015**.

Partnership for the Assessment of Readiness for College and Careers (PARCC)

- Mississippi is a **governing state** in the PARCC consortium; as such, Mississippi will be on the governing board that makes decisions about the assessment design and development.
- The **original PARCC assessment design** has been revised.

PARCC's Original Assessment Design

English Language Arts and Mathematics, Grades 3 - 11



Refinements Respond to State Concerns

In adopting the refined assessment design, PARCC incorporated feedback from member states regarding:

- The cost of the assessments
- The amount of testing time needed to administer the assessments
- Possible disruption to school schedules caused by through-course assessment preparation and administration
- Potential limits to local control of curriculum and instruction

Partnership for Assessment of Readiness for College and Careers:

PARCC

The assessment design was revised in June 2011.

Revised PARCC: Two Components of the Summative Assessment

In Mathematics and in English Language Arts (ELA):

- Given primarily on computer or other digital devices
- Composed primarily performance tasks with emphasis on hard-to-measure standards
- Results returned within 2 weeks

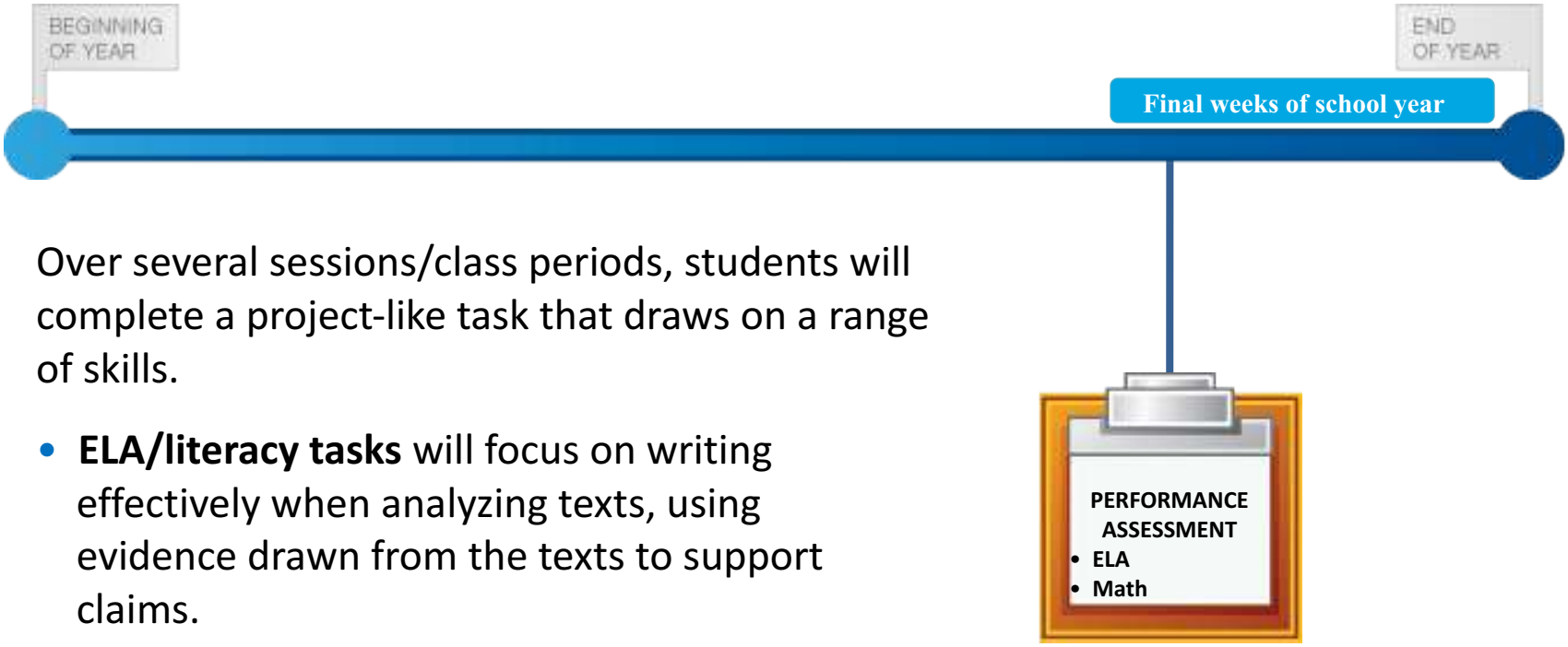
+

- Given on computer, with multiple item types and technological tools
- Scored entirely by computer for fast results

- Scores from the performance assessment and the end-of-year test will be combined for annual accountability scores.

Revised PARCC:

Performance Assessment



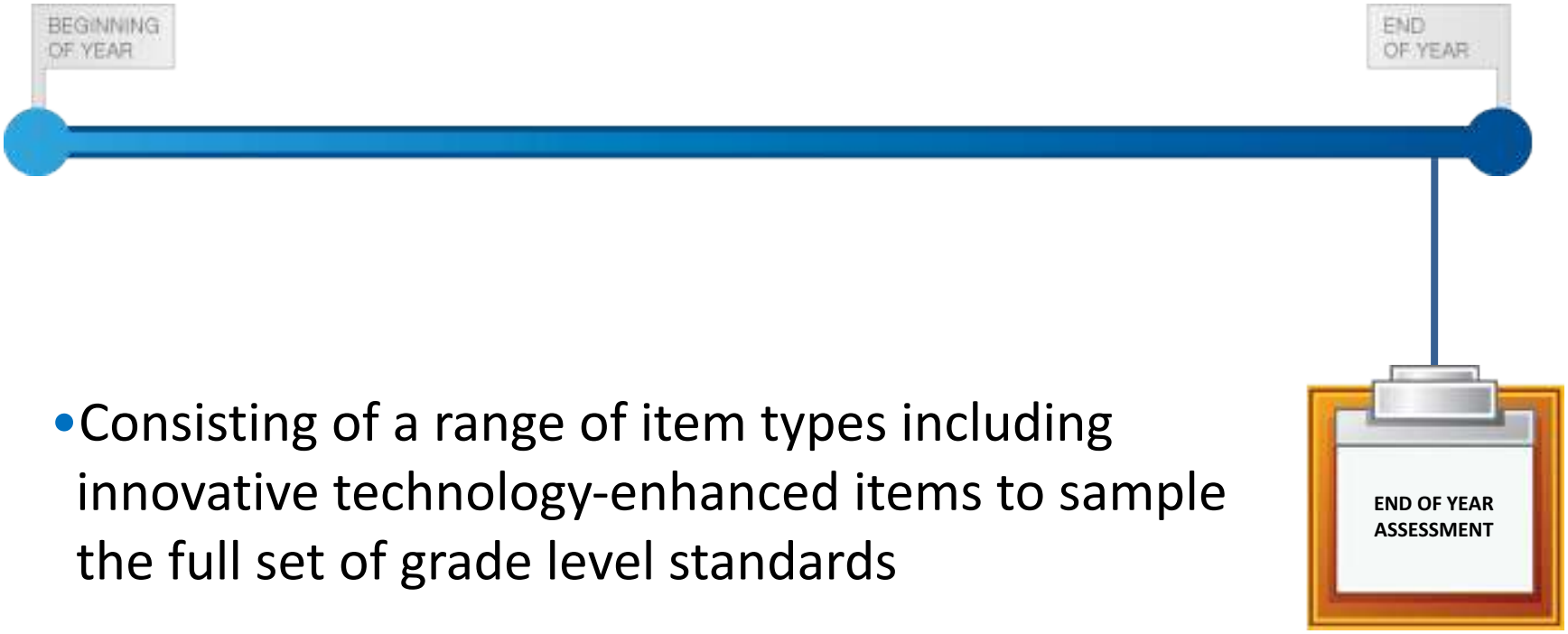
Over several sessions/class periods, students will complete a project-like task that draws on a range of skills.

- **ELA/literacy tasks** will focus on writing effectively when analyzing texts, using evidence drawn from the texts to support claims.

- **Math tasks** will require students to apply key mathematical skills, concepts and processes to solve complex problems of the types encountered in everyday life, work and decision-making.

Revised PARCC:

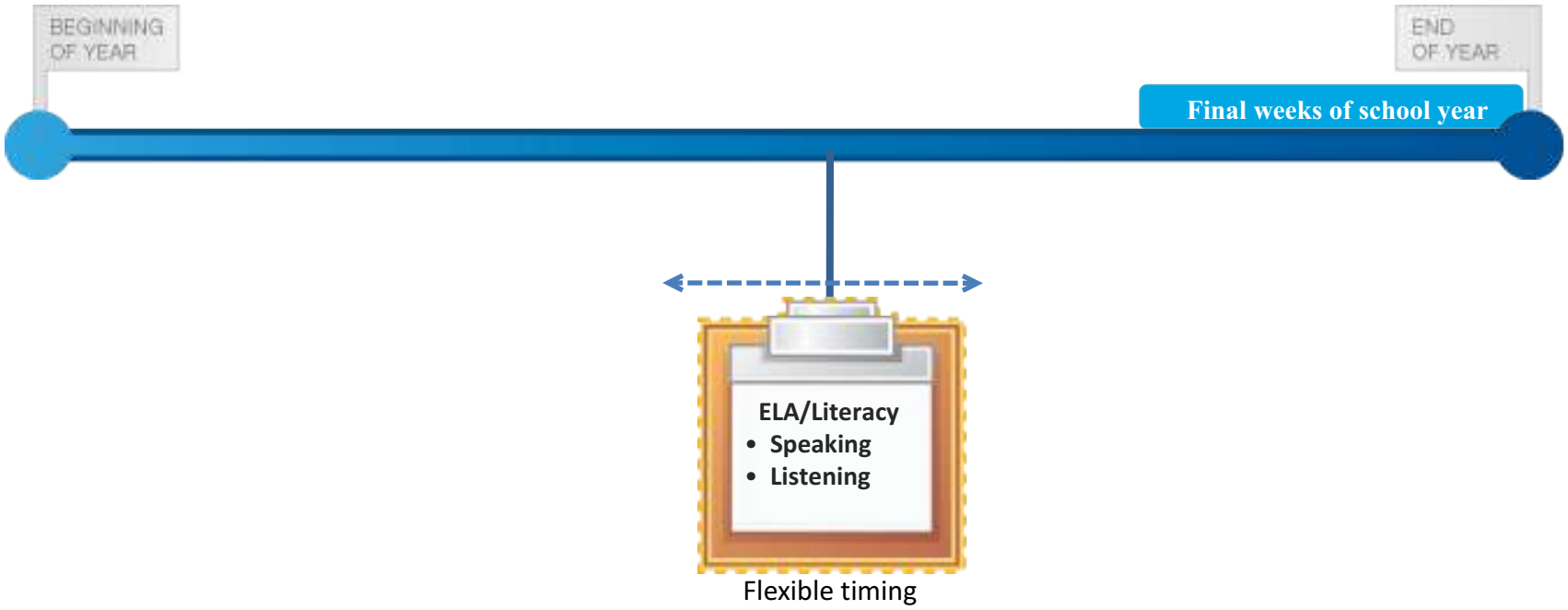
End-of-Year Assessment



- Consisting of a range of item types including innovative technology-enhanced items to sample the full set of grade level standards
- Will include items across a range of cognitive demand

Revised PARCC:

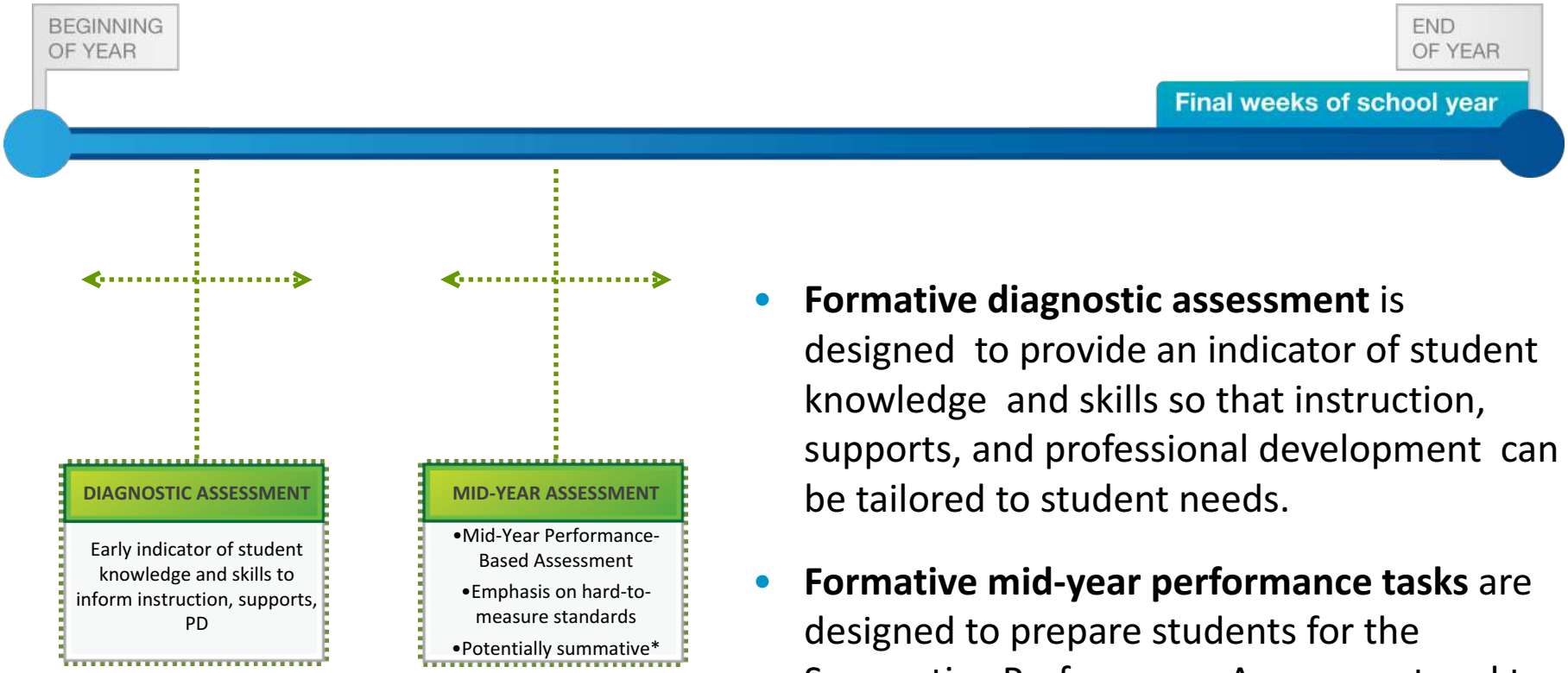
Speaking/Listening Assessment



- Required assessment, but not used for accountability
- Administered in the ELA classroom, with flexible window for administration
- Scored by classroom teacher using standardized rubric
- Scores may be used within students' grades

PARCC Supports:

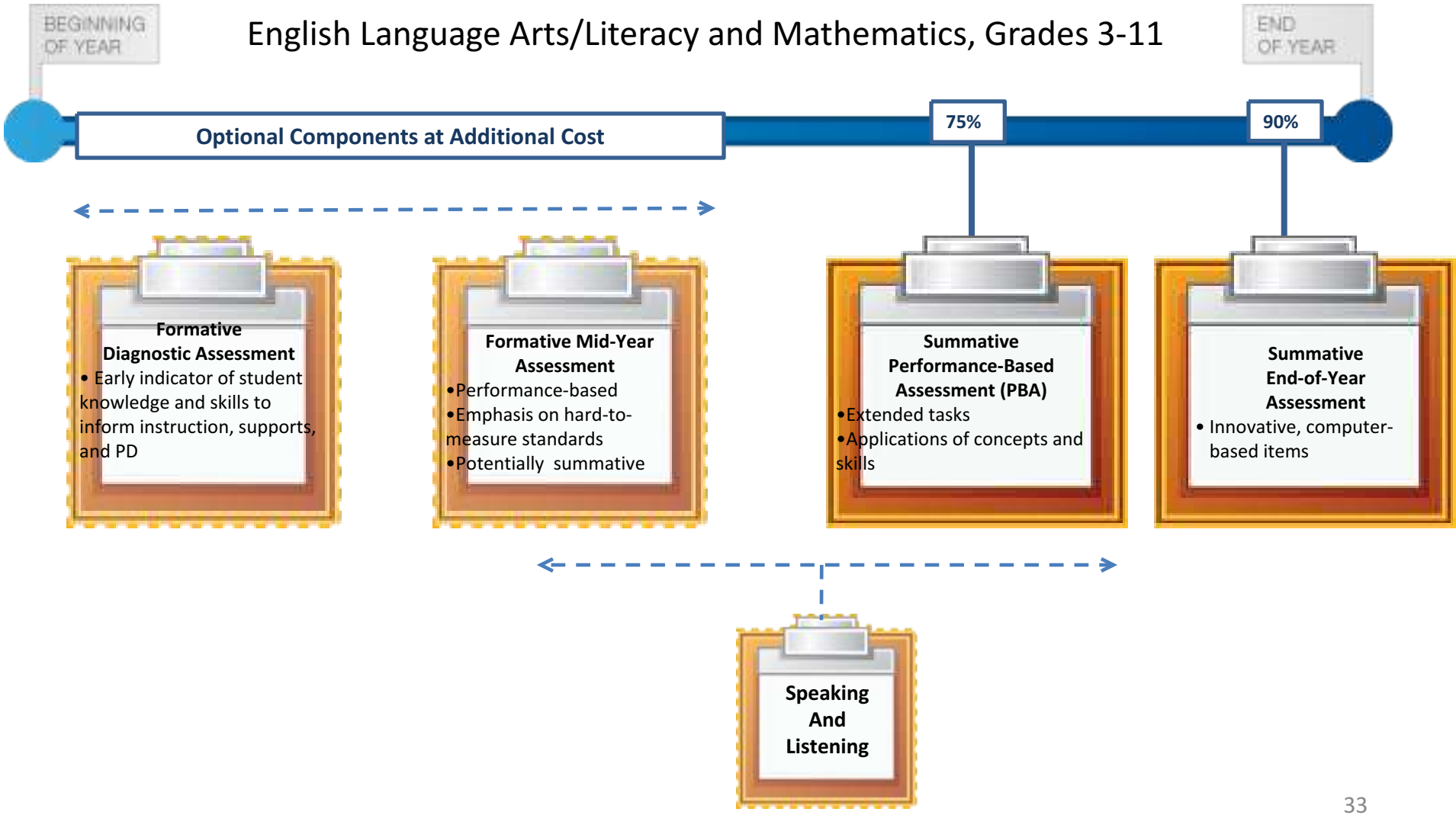
Optional Formative Assessments



Timing of formative components is flexible

- **Formative diagnostic assessment** is designed to provide an indicator of student knowledge and skills so that instruction, supports, and professional development can be tailored to student needs.
- **Formative mid-year performance tasks** are designed to prepare students for the Summative Performance Assessment and to yield instructionally useful feedback. Teachers will be given an online scoring tool to score tasks and improve understanding of the CCSS expectations. For voluntary use, the timing of the administration is to be locally determined.

The Revised PARCC Assessment Design



PARCC Supports:

The Partnership Resource Center

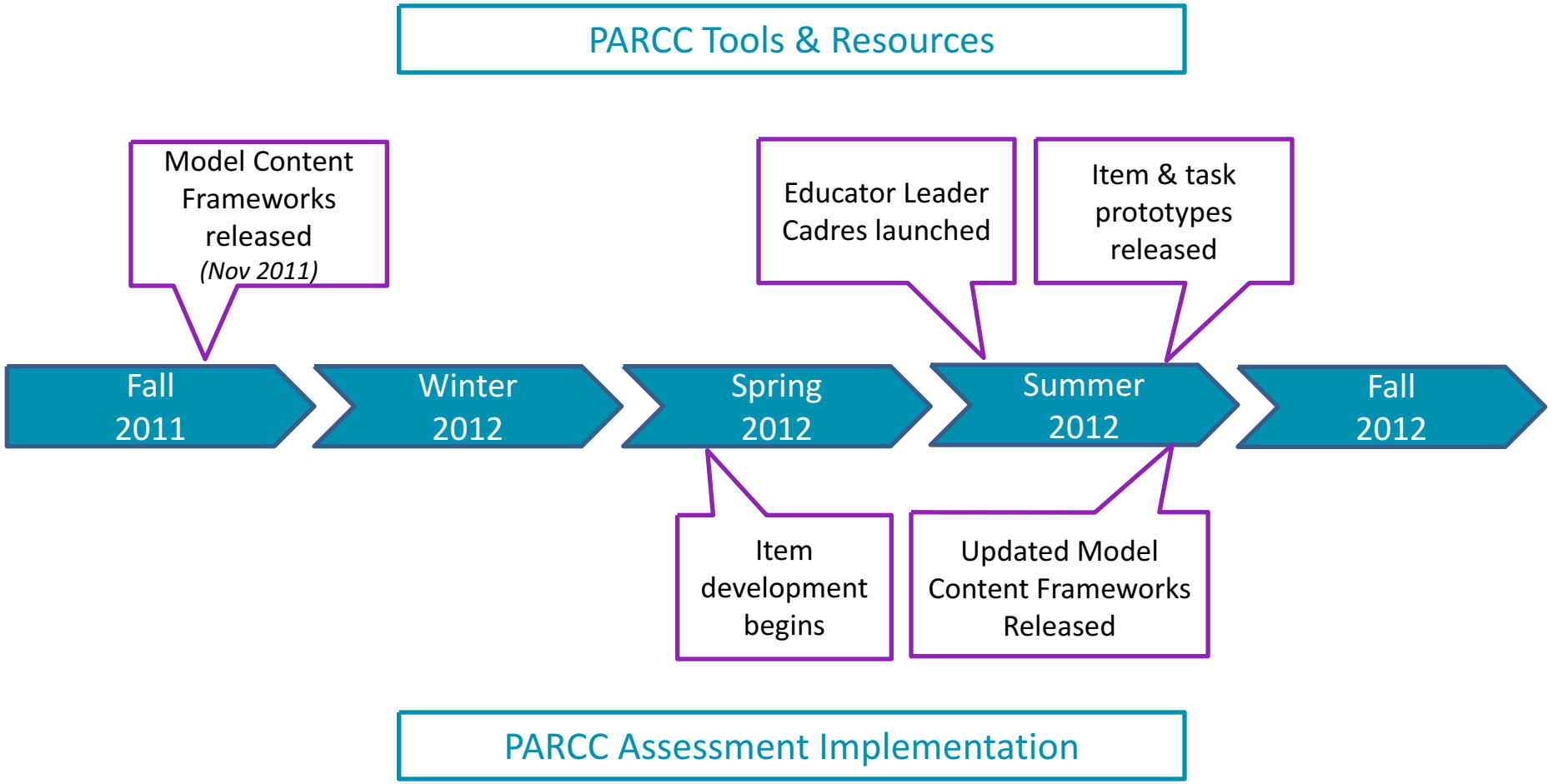
Partnership Resource Center:

- Interactive Data Tool for accessing data and creating customized reports
- Model lesson plans
- Formative assessment items and tasks
- Professional development materials regarding test administration, scoring, and use of data
- Online practice tests
- Item development portal
- Tools and resources developed by Partner states
- Optional “ready-to-use” performance tasks for K-2

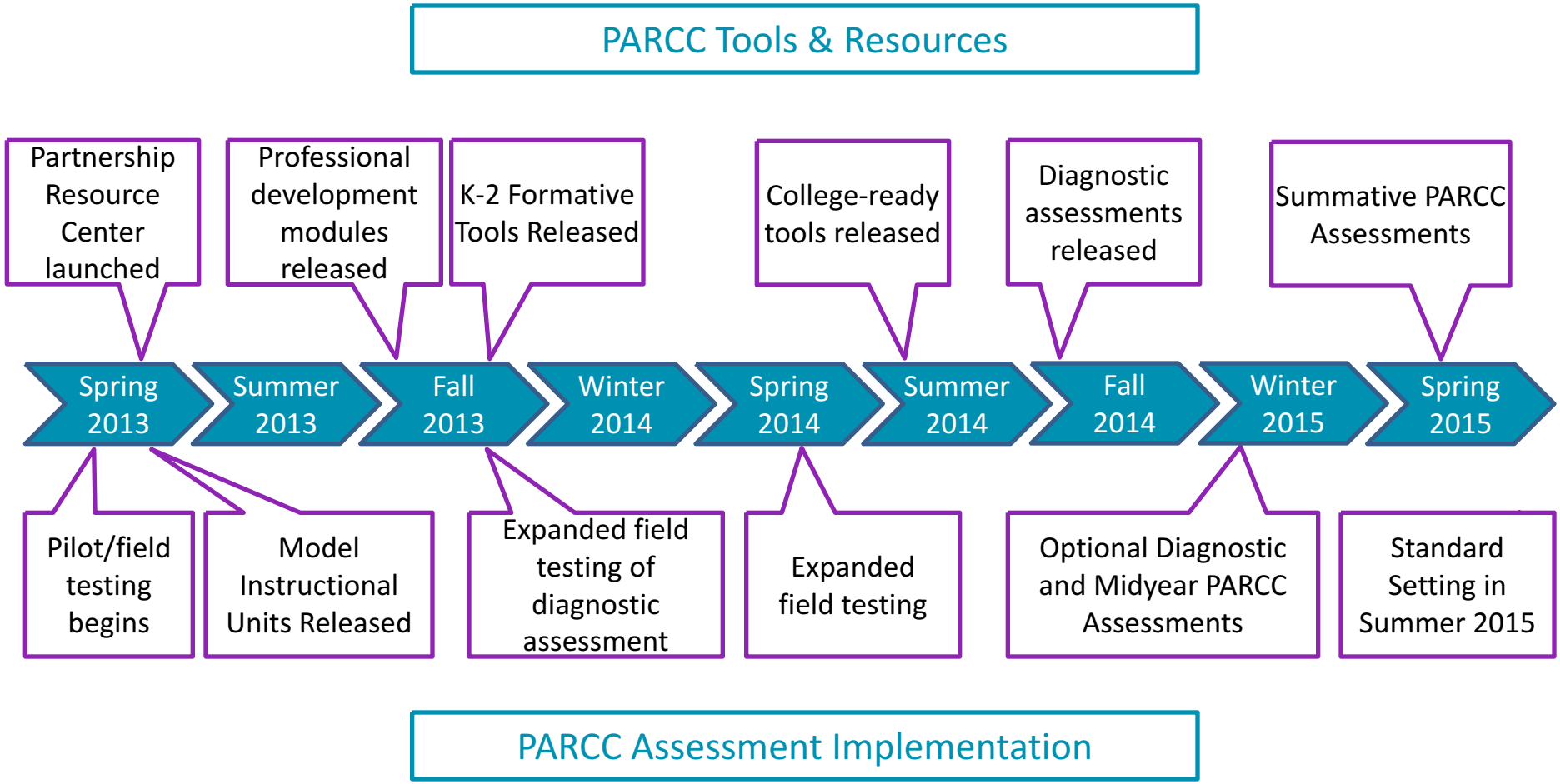
PARCC Implementation Milestones

2011-2012	Item and task development, piloting of components Release of Model Content Frameworks and prototype items and tasks Development of professional development resources and online platform
2012-2014	Field testing
2014-2015	**New summative assessments in use**
Summer 2015	Setting of common achievement standards

PARCC Timeline Through 2011-2012



PARCC Timeline Through First Test Administration in 2014-2015



Key Challenges for PARCC

Technical Challenges

- Developing an interoperable technology platform
- Transitioning to a computer-based assessment system
- Developing and implementing automated scoring systems and processes
- Identifying effective, innovative item types

Implementation Challenges

- Estimating costs over time, including long-term budgetary planning
- Transitioning to the new assessments at the classroom level
- Ensuring long-term sustainability
- Building on CCSS implementation

Policy Challenges

- Student supports and interventions
- Accountability
- High school course requirements
- College admissions/ placement
- How to change perceptions about what next-gen assessments can and will do

Snap Shot of the PARCC website - http://www.parcconline.org/

About PARCC

- PARCC is a consortium of states working together to develop next generation K-12 assessments in English and math.

PARCC benefits:

- ***Students*** who will know if they are on track to graduate ready for college and careers
- ***Teachers*** with regular results available to guide learning and instruction
- ***Parents*** with clear and timely information about the progress of their children
- ***States*** with valid results that are comparable across the member states
- ***The nation*** as it is based on college- and career-ready, internationally-benchmarked CCSS

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Efforts in MS

- Textbook Adoption
- Implementation timeline
- Training for teachers, administrators, and higher education faculty
- Early learning standards for Pre-K programs (MS Early Childhood Standards)

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Textbook Adoption Timeline

2011 - 2012**Reading/Literature**

2012 - 2013**Mathematics Grades K - 8**

(excluding Algebra I)

2013 - 2014**English/Language Arts**

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Implementation in MS

The implementation process began with K-2 in 2011-12.

K-2 was selected as the initial implementation grade span because:

- *Participant feedback from overview sessions was highly favorable to begin with K-2.*
- *2011-12 kindergarten students will be the first 3rd graders to participate in the Assessments for grades 3 - 11 during the 2014-15 school year.*
- *High stakes testing does not occur at the K-2 grade levels.*

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Suggested Implementation Timeline

2011 - 2012**Grades K-2**

2012 - 2013**Grades 3-8**

2013 - 2014**Grades 9-12**

2014 - 2015**Live Assessments**

It may help to think of implementation as a multi-year process of weaving the Common Core State Standards into the fabric of classroom instruction until the CCSS have replaced the MS Curriculum Frameworks.

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CCSS Training Timeline

Revised January 2012

- ***Proposed training schedule pending funding & PARCC resources.***
- ***Intended to get ready for CCSS & Assessments as early as possible.***

Grades	Summer 2011	Fall 2011	Spring 2012	Summer 2012	Fall 2012	Spring 2013	Summer 2013
K – 2	Training	Follow Up	Follow Up				
3 – 5		Training			Follow Up	**Follow Up**	
6 – 8			Training		Follow Up	Follow Up	
9 – 12				Training		**Follow Up**	Follow Up

K-12 follow-up sessions via webinar and face to face will occur around the state.

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CCSS Training

- Awareness sessions have been conducted through the RESAs and state conferences.
- Training sessions have been conducted for K-2, 3-5, and 6-8 grade bands.
- Training sessions for higher education faculty are being conducted.

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Early Learning Standards (ELS)

- Early learning standards (ELS) for programs serving 3- and 4-year-old children have been developed that are aligned to the CCSS for Kindergarten in ELA and Math.
- The ELS were approved by the State Board of Education on January 20, 2012.
- Early learning standards for other areas (scientific investigation, social emotional development, and physical development) will be revised during the 2012-2013 school year.
- The Kindergarten Guidelines have been revised.
- Training on the ELS is being conducted during Summer 2012.

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Educator Leader Cadre

- Develop a **network of K-16 educators** that can help lead **implementation** of PARCC and the CCSS
- Lay the groundwork for **sharing best practices** and **quality resources**
- Strengthen their **content expertise** and become **leaders in their state**

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Other Committees

Additional Steering Committees of practitioners have been formed to assist in implementing the CCSS.

- Math 9-12
- ELA 9-12
- SATP Transition
- PARCC Item Review
- Alternate Assessment

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PARENTS' GUIDE TO Student Success

National Parent Teacher Association (PTA®) created guides for grades K-8 and two guides for grades 9-12 (one for English/Language Arts and one for Mathematics) based on the Common Core State Standards (CCSS).

Each *Guide* includes:

- ***Key items*** *that children should be learning in English /Language Arts and mathematics in each grade once the CCSS are fully implemented.*
- ***Activities*** *that parents can do at home to support their children's learning.*
- ***Methods*** *for helping parents build stronger relationships with their child's teacher.*
- ***Tips*** *for planning for college and career (high school only).*

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List of Electronic Resources

www.pta.org (Key Resources)

- **Parents' Guide to Student Success in English and Spanish (Per Grade Level)**
- **Parents' Guide to Student Success – Frequently Asked Questions**
- **Common Questions about the Parents' Guide to Student Success**

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Resources

Common Core Website
www.corestandards.org

PTA Website
www.pta.org

MDE Website – Hot Topics
www.mde.k12.ms.us

PARCC Website
www.parcconline.org

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