

Math Curriculum

Student Achievement Committee

October 24, 2022



WAKE COUNTY
PUBLIC SCHOOL SYSTEM

Intended Outcomes

- Provide an overview of the district math curriculum procurement process.
- Understand the national, state and local curriculum landscape and instructional resources.
- Clarify our current and desired state and identify the forces driving and preventing progress toward the desired state.

Defining Standards and Curriculum



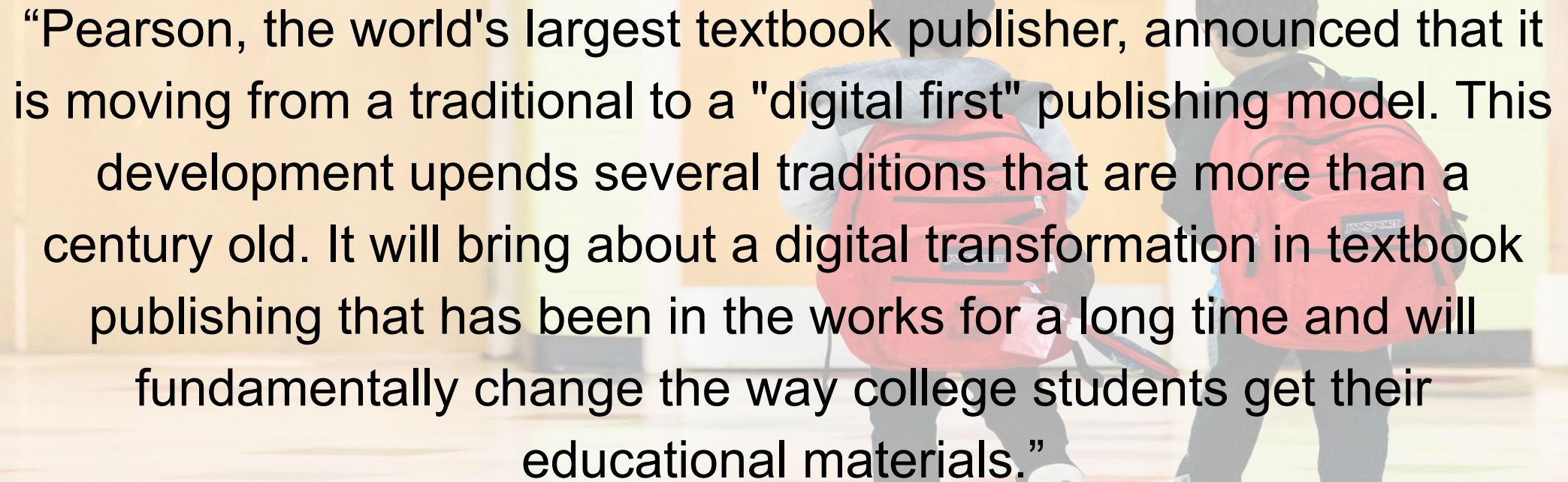
The ***North Carolina Standard Course of Study (NCSCOS)*** defines the appropriate content standards for each grade or proficiency level and each high school course to provide a uniform set of learning standards for every public school in North Carolina. These standards define what students are expected to know and be able to do by the end of each school year or course.



Curriculum is a standards-based sequence of planned experiences where students practice and achieve proficiency in content and applied learning skills.

The structure, organization, and considerations in a curriculum are created in order to enhance student learning and facilitate instruction.

Curriculum Resource Market Transformation Across the Nation

A photograph of two children from behind, walking away in a school hallway. They are wearing red backpacks and dark clothing. The hallway has wooden doors and a green sign with a white letter 'A' on the wall. The floor is polished and reflects the light.

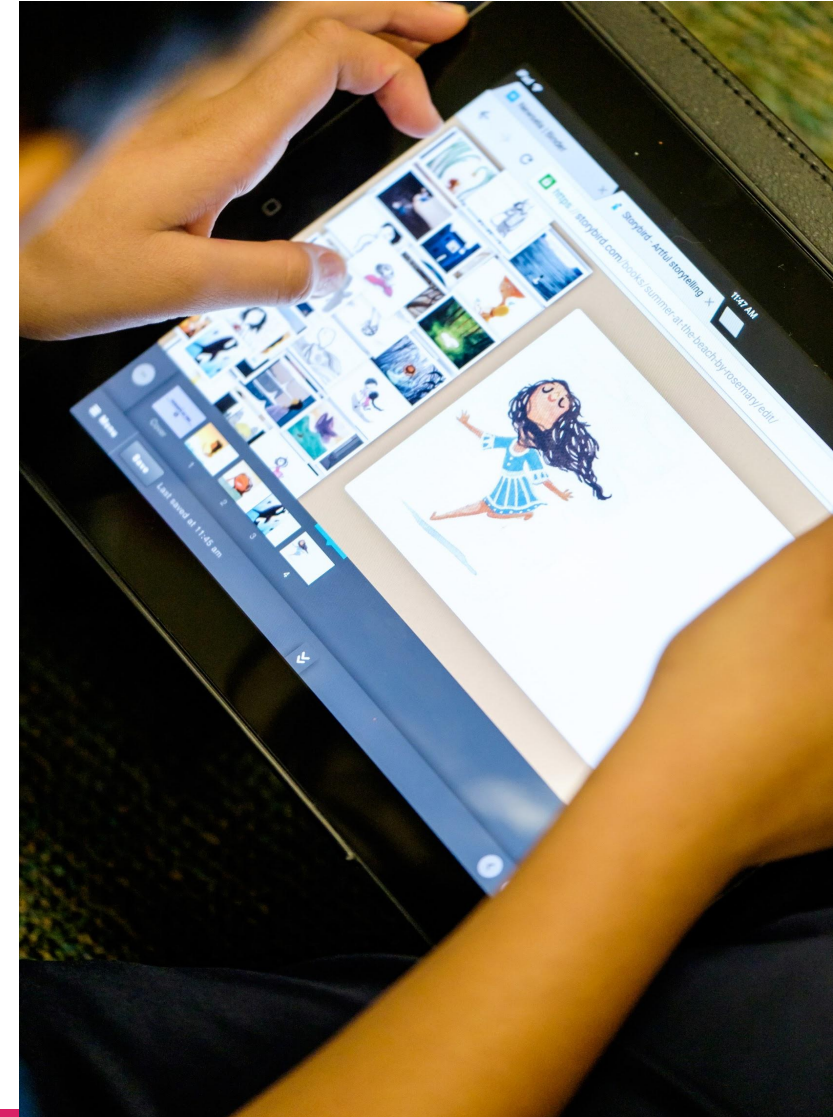
“Pearson, the world's largest textbook publisher, announced that it is moving from a traditional to a "digital first" publishing model. This development upends several traditions that are more than a century old. It will bring about a digital transformation in textbook publishing that has been in the works for a long time and will fundamentally change the way college students get their educational materials.”

Advantages of Digital Textbooks & Resources

- ***Hyperlinking*** directs students to sources of more information on a given topic or statement.
- ***Updated Information*** - A major advantage that digital textbooks have over print media is their ability to be frequently updated.
- ***Enhanced Learning Experience*** - Digital textbooks can include video clips, interactive quizzes to test students' mastery of content, audio clips to help students with foreign languages, and message boards in which students interact with a larger community.
- ***Budget-Friendly*** - E-books can be updated with little cost and do not suffer wear and tear of traditional textbooks.

Accessibility Provided Through Digital Resources

- Immersive Reader
- Highlight Feature
- Draw Feature
- Feedback Provided
- Digital Manipulatives
- Students are able to express their learning through multiple modalities (video, text, annotation, images, audio).



Curriculum Resource Market Transformation Across North Carolina

#GoOpenNC is North Carolina's Open Education Resources Platform. In this platform you can explore standards aligned supplemental instructional resources in collections, hubs, and create your own custom folders of saved resources. Create your own openly licensed instructional materials to share with your school, district, or the entire state.



Why Open Education Resources?

Open Educational Resources (OER) Support Equity and Flexibility

The worldwide OER movement is rooted in the human right to access high-quality education. This shift in educational practice is not just about cost savings and easy access to openly licensed content; it's about participation and co-creation. Open Educational Resources (OER) offer opportunities for systemic change in teaching and learning content through engaging educators in new participatory processes and effective technologies for engaging with learning.



WCPSS Leading in the Curriculum Resource Market Transformation

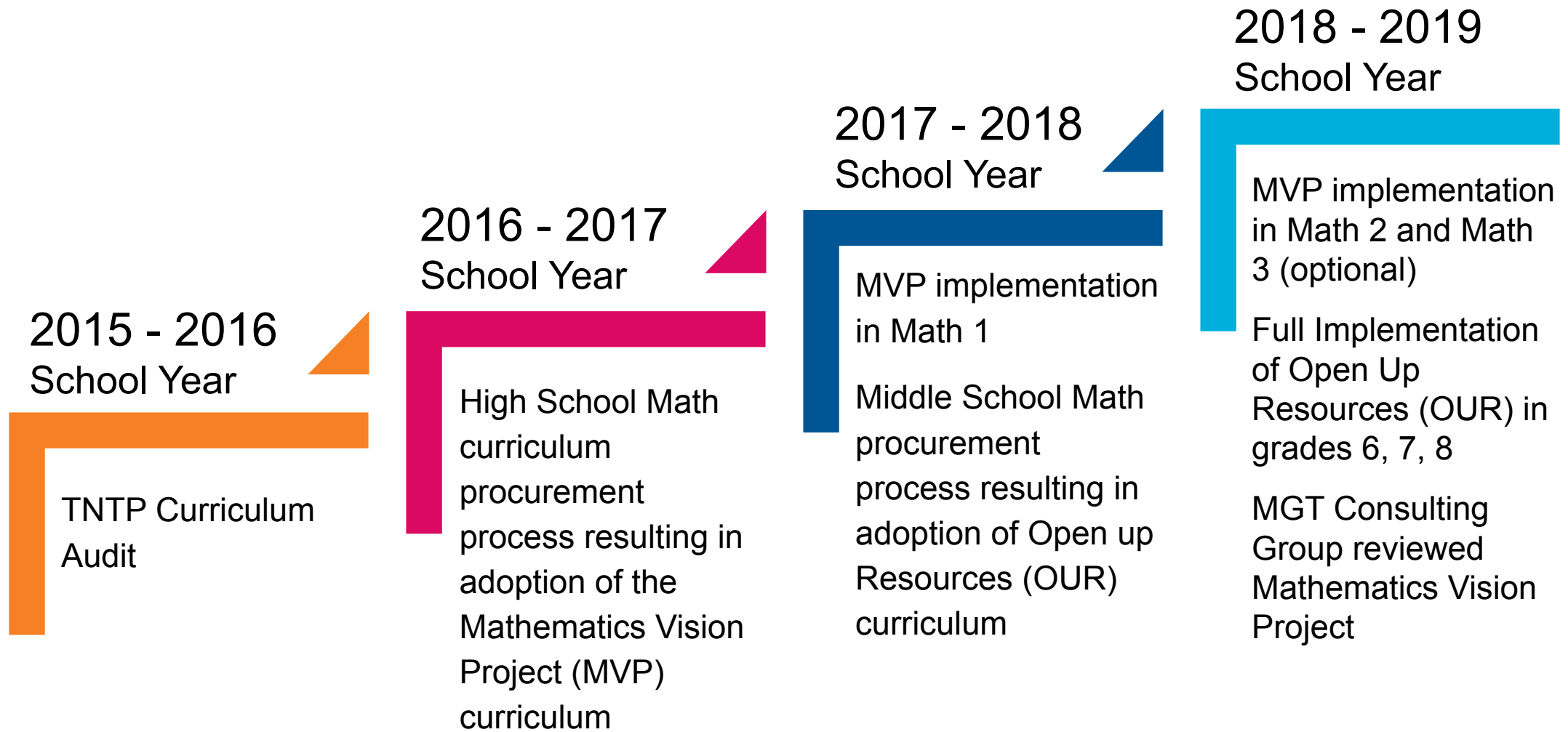


FROM HERE,
ANYTHING
IS POSSIBLE.

Curriculum Procurement Process:

- Established a multidisciplinary team for review
- Request for Purchase
- Vetted resources using the Instructional Materials Evaluation Tool (IMET)
- Evaluation indicated 3 curricula that met the standards and instructional pedagogy expectations
- Gathered feedback from families and staff
- Field testing by staff
- Final Recommendation

Math Curriculum Adoption Timeline



Teaching and Learning Mathematics



“Teachers who incorporated a lot of hands-on, active learning received high marks from students and raised test scores. These teachers often had students working together collaboratively in pairs or groups, using tactile objects to solve problems or play games.”

Jill Barshay

Materials and Resources

Teacher Resources

- Online Teacher Edition
- Online Learning Central Course
- Non-Consumable Math Kit (OUR)

Student Resources

- NC Student Workbooks- Physical book

Digital Resources

- Teacher Canvas Course
- Student Canvas Course

Parent Resources

- WCPSS K-12 Math Website
- Resource and Links Pages (MVP and OUR workbooks)

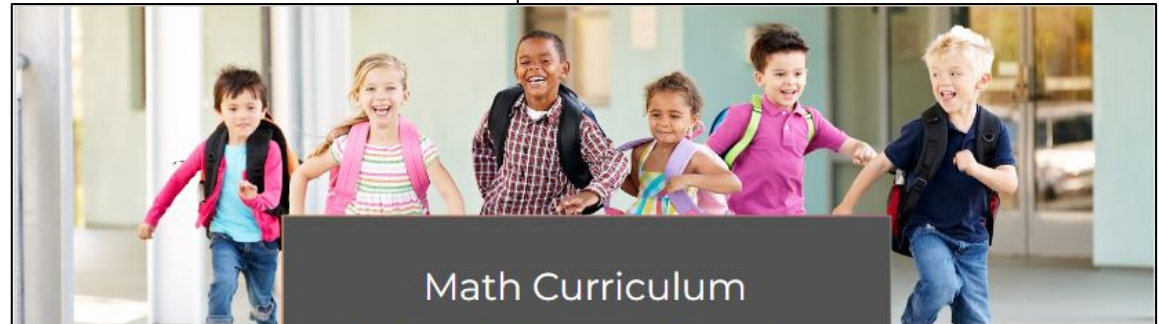
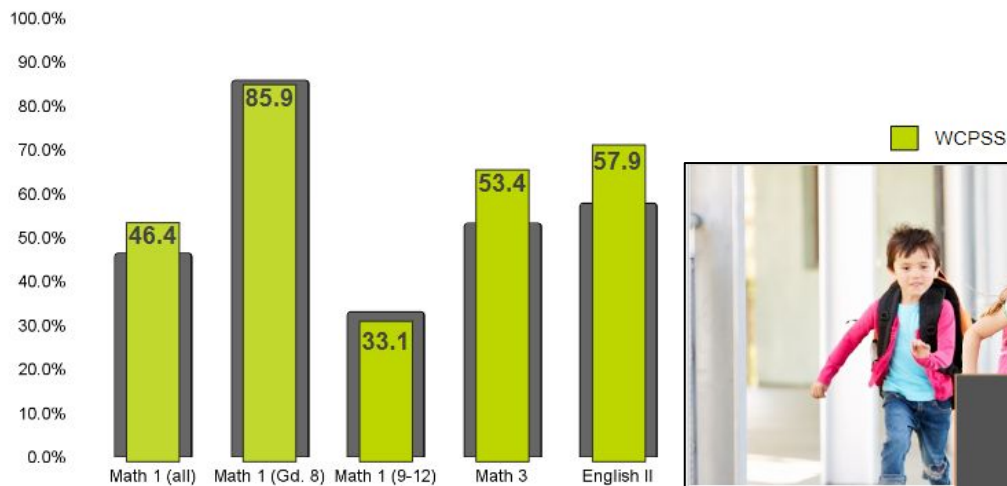


Summarize Current State

Intended Outcomes:

- Review of Mathematics instructional resources since 2015-2016
- Review of Mathematics during the 2022-23 school year
- Specific Mathematics 2022-23 school year
- Next Steps

WCPSS Outperformed NC in EOC Proficiency in 2021-22



Math Curriculum Student Achievement Committee

October 24, 2022

Systems Reflection and Planning Discussion

Purpose

Engage in a systems reflection and planning protocol, to clarify desired state and identify the forces driving and preventing progress toward the desired state.

Group Assignments		
<p>Group A</p> <p>Facilitator: Michele Woodson</p> <p>Board Members: Jim Martin Karen Carter Tara Waters</p>	<p>Group B</p> <p>Facilitator: Lauren Acome</p> <p>Board Members: Chris Heagarty Christine Kushner Heather Scott</p>	<p>Group C</p> <p>Facilitator: Emily Mountford</p> <p>Board Members: Monika Johnson-Hostler Roxie Cash Lindsay Mahaffey</p>

Systems Reflection and Planning Discussion

Purpose

Engage in a systems reflection and planning protocol, to clarify desired state and identify the forces driving and preventing progress toward the desired state.

As a Small Group:

Round 1: **Identify desired state** of math curriculum and implementation in WCPSS.

Round 2: **Identify *potential* drivers** that create growth and progress towards the future state.

Round 3: **Identify *potential* barriers** that prevent growth and progress towards the future state.

Process for Each Round:

1. Individual members brainstorm and list one idea per sticky note.
2. Post on chart paper and discuss themes and patterns.
3. Chart and list additional ideas from members during the discussion.

Closing & Next Steps

Next Steps

- District facilitated walkthroughs for board members
- Ongoing monitoring of curriculum implementation
- Support high quality instruction and the effective teaching practices
- Gather feedback from teachers, students and parents to make further enhancements or adjustments.