

# DISTRICT 90 CURRICULUM & INSTRUCTION OVERVIEW

OCTOBER 17, 2022

# TOWN HALL MEETING AGENDA

- D90 Curriculum and Instruction goals
- Curriculum review process overview
- Instructional materials pilot process
- Content area overviews: Science Pilot,
   Math, English Language Arts, and Social
   Studies
- Professional learning and collaboration

#### DISTRICT 90 CURRICULUM AND INSTRUCTION GOALS

#### Provide Identify Partner Provide Ensure Engage Identify high-Provide Partner with Engage in Provide on-Ensure cohesive K-8 universities collaborative consistent quality going, jobinstructional embedded student learning and processes professional professional continuum materials for and shared learning organizations for all decisionexperience all content **learning** to help guide across each students areas making grade level decisionmaking

#### DISTRICT 90 CURRICULUM REVIEW PROCESS



Form a representative curriculum review committee



Review current educational research and best practices instruction



Develop vision statement for content area under review



Apply screening rubric to recommended materials



Pilot top two finalists in classrooms with students



Gather quantitative and qualitative feedback from piloting teachers



Analyze results

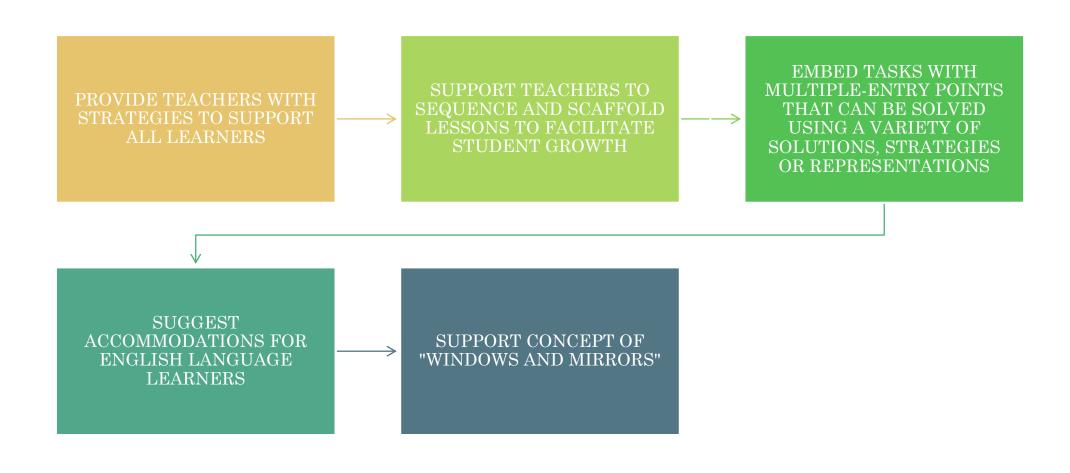


Provide recommendation to the Board of Education for adoption

## THE ROLE OF STANDARDS IN TEACHING AND LEARNING

- Serve as the building blocks for curriculum and instruction
- Ensure learning is cohesive skills and concepts scaffold over time
- Provide consistency and alignment horizontally across grade levels and vertically from grade to grade
- Support grade level and department collaboration
- Required by Illinois State Board of Education

#### EQUITABLE INSTRUCTIONAL PRACTICES



ESSENTIAL
UNDERSTANDINGS
FOR SELECTING
INSTRUCTIONAL
MATERIALS

Teachers guide student learning; materials support the process

There is no perfect instructional program or set of materials

The pilot process has acknowledged limitations

Professional development is critical for the success of the implementation

On-going professional collaboration is essential for instructional alignment

#### INSTRUCTIONAL MATERIALS RUBRIC CRITERIA



ALIGNMENT TO CONTENT AND PRACTICE STANDARDS



COHERENCE OF STUDENT LEARNING PROGRESSIONS



PRESENCE OF TEACHER SUPPORT



QUALITY OF FORMATIVE AND SUMMATIVE ASSESSMENTS



**EQUITABLE PRACTICES** 

#### Instructional Materials Screening Rubrics and Consulting Partners

Content Area	Rubric	Consulting Partner
English Language Arts	California County Superintendents: Adoption Toolkit – English Language Arts (2015)	Columbia University (NY), Teachers College Reading and Writing Project
Mathematics	Council of Chief State School Officers: Math Curriculum Materials Analysis Project (2011)	University of Illinois at Chicago – Metro Chicago Math Initiative
Science	NextGen Time (2018)	BSCS Science Learning
Social Studies (5-8)	TBD	Illinois Civics Hub & DuPage Regional Office of Education

## BSCS SCIENCE LEARNING PARTNERSHIP

- Non-profit organization devoted to science education
- Mission is to transform science teaching and learning through research-driven innovation
- Supported by National Science
   Foundation to develop tools and guidelines to evaluate quality of science programs
- Facilitates NextGen Time professional learning

NEXT
GENERATION
SCIENCE
STANDARDS:
THE THREE
DIMENSIONS OF
SCIENCE
LEARNING



Crosscutting concepts: exploring connections across the four domains of science

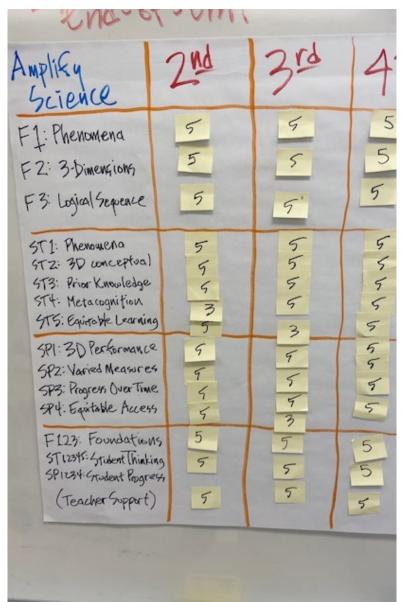


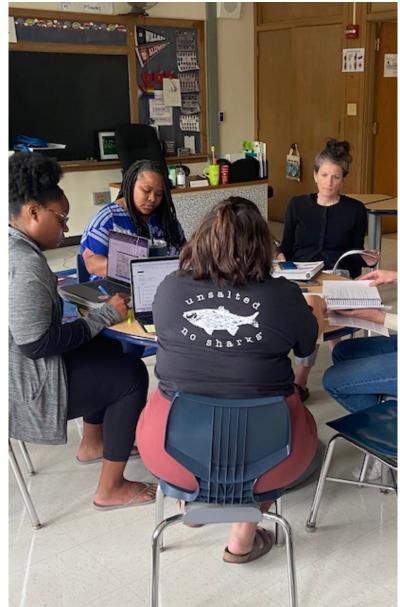
Science and Engineering Practices: describe what scientists do to investigate the natural world and what engineers do to design and build systems



Disciplinary Core Ideas: key ideas in science that have broad importance within or across multiple science or engineering disciplines

# SCIENCE PILOT MATERIALS VETTING





#### Science Pilot Tool: Teacher Reflection on Student Learning

Program	Grade
Chapter/Module # and Title	Lesson Title
Student Learning Experience (e.g., investigation, experiment, lab,concept map, graphic organizer, assessment, discussions, etc.)	
Phenomena/Problem	
Summarize key lesson learned (e.g., what did students	"get", what are they still missing?) from analyzing student work? (Tool #1)
Summarize student reflections (e.g., range and trends	in student responses (Tool #2)
Strengths	Limitations
Modific	cations/Recommendations for Customization

Source: BSCS Science Learning (2018)

#### Science Pilot Tool: Team Reflection on Student Learning

Program	Grade						
Chapter/Module # a	and Title	Lesson Title					
Overall Student Score (Combine individual class results from Tool #1)							
High Q	uality Work	Medium C	Medium Quality Work		Low Quality Work		
Pooled Tally for All Students	Pooled Percentage (Pooled Tally/N X 100%)	Pooled Tally for All Students	Pooled Percentage (Pooled Tally/N X 100%)	Pooled Tally for All Students	Pooled Percentage (Pooled Tally/N X 100%)		
Score  How well did the instructional materials support student learning? Circle the score (i.e., 5, 3 or 1) based on Pooled Tally Percentage based on the percentage of <u>high-quality</u> work.  Record on Next Gen AIM Pilot Score Sheet.		<b>5</b> (66% and above High- Quality Student Work)	3 (33 to 65% High-Quality Student Work)	<b>1</b> (32% and below High- Quality Student Work)			
As a team, would you recommend that this student learning experience remain as is? Why or why not? What changes would you recommend?  What professional learning is needed to better implement this learning experience to increase student understanding?							
what professional real	Time is needed to better i	implement this learning ca	Aperience to mercuse state	zent understanding:			

Source: BSCS Science Learning (2018)

#### Science Pilot Rubric: Evidence of Support for Teachers

Directions: Record the score from the Paperscreen for each component in the space provided. Record and analyze evidence from your actual experience using the following questions as a guide.

- To what extent did the evidence cited and the score in Paperscreen match your experience with the materials?
- How did the materials support your use? What were the missed opportunities?

Determine score (5 = high- quality, 3 medium-quality, 1 low-quality) for each component of the Support for Teachers based on your pilot experience.

Component of Support for Teachers	Pscreen Score	Pilot Score	Response to Questions (Cite Evidence)
TS1. Phenomenon/Problem Driven Three-Dimensional Learning. Teacher materials	-		
provide:			
background information about the phenomena or problems included in the learning			
sequence and across sequences.			
<ul> <li>an explanation of the role of phenomena or problems in driving student learning.</li> </ul>			
rationale for why the unit phenomena or problems were selected for the targeted			
DCIs, SEPs, and CCCs.			
<b>TS2. Coherence.</b> Teacher materials describe and provide a rationale for:			
• the conceptual framework and sequence of ideas, practices, and learning experiences			
in the learning sequences and across sequences.			
• strategies for linking student experiences across lessons to ensure student sense-			
making and/or problem-solving focused on phenomena or problems is linked to			
learning across all three dimensions.			
Connections to other science domains, nature of science, engineering, technology, and			
applications of science, math, and ELA.			
<b>TS3.</b> Effective Teaching. Teacher materials support the use of and provide a rationale and			
evidence of effectiveness for strategies that:			
<ul> <li>support students in learning through authentic and meaningful phenomena or design problems.</li> </ul>			
<ul> <li>support student learning across the three dimensions.</li> </ul>			
<ul> <li>make student thinking visible; promote reasoning, sense-making, and problem-solving;</li> </ul>			
challenge student thinking; and develop metacognitive abilities.			
TS4. Support for Students with Diverse Learning Needs. Teacher materials provide an			
array of strategies:			
to support student access to the targeted learning goals, experiences, and			
performances.			
• that help teachers differentiate instruction.			
TS5. Support to Monitor Student Progress. Materials provide support for teachers to:			
monitor student learning and progress over time.			
make decisions about instruction and provide feedback to students.			

PROFESSIONAL LEARNING AND CURRICULUM IMPLEMENTATION Professional learning is required when new instructional materials are adopted

District 90 collaborates with universities or professional organizations to provide training

In-depth training is provided by experts in the field

Implementation plans outline expectations for implementation and continued collaborations

# K-8 OVERARCHING STUDENT GOALS FOR LITERACY INSTRUCTION

#### Students will...

- read strategically and think critically about text
- become flexible thinkers who gather evidence to support, refute, or re-evaluate ideas based on new information
- be able to communicate clearly with purpose and intent
- see themselves as life-long readers and writers

# THE SCIENCE OF READING

- Phonics instruction is beneficial to students in Grades K-2
- Instruction should be explicit and systematic
- Duration of effective instruction is 30 minutes/day
- It is not a product, a package, or a program
- The Science of Reading is always evolving

Source: The Science of Reading. Tim Shanahan, University of Illinois at Chicago. www.shanahanonliteracy.com



#### FOUNDATIONAL LITERACY SKILLS

- Phonemic Awareness
- Phonological Awareness
- Phonics
- Word Attack
- Spelling

#### COMPONENT OF A BALANCED LITERACY PROGRAM

#### Reading

- Read Aloud
- Shared Reading
- Guided Reading
- Reading Workshop
- Class Novels
- Book Clubs
- Independent Reading

#### Writing

- Writing Workshop: brainstorming, drafting, revising, editing, publishing
- Shared Writing
- Handwriting
- Exploration of Writing Genres: narrative, opinion, informational, argument, poetry
- Grammar and conventions

#### D90 Foundational Balanced Literacy Resources

Balanced Literacy Component	Resource	Author(s)
Phonemic Awareness	Heggerty Phonemic Awareness: The Skills They Need to Help Them Succeed!	Michael Heggerty
Phonics	Fundations (K) Fountas and Pinnell Classroom (1-5)	Wilson Language Training Irene Fountas & Gay Su Pinnell
Guided Reading	Guided Reading: Responsive Teaching Across the Grades	Irene Fountas & Gay Su Pinnell
Handwriting	Handwriting Without Tears	Learning Without Tears
Reading Workshop	Units of Study for Teaching Reading	Columbia University (NY) Teachers College Reading and Writing Project
Writing Workshop	Units of Study for Teaching Writing	Columbia University (NY) Teachers College Reading and Writing Project
Read Aloud, Book Clubs, Independent Reading	Classroom Library Collections: fiction, non- fiction, picture books, poetry	Various

#### COMPONENTS OF WORKSHOP MODEL OF TEACHING



Name the teaching point for the day



Provide a 10-12 minute mini-lesson to model teaching point objective



Active engagement



Independent practice



1:1 conferences with students or small group instruction



Share

#### READING SUPPORT: INTERVENTION RESOURCES



- Fundations (phonics)
- Heggerty Bridge the Gap: Intervention Lessons (phonemic awareness)
- Learning A to Z (fluency)
- Fountas and Pinnell: Leveled Literacy Intervention (comprehension)
- Wilson Reading System (supplementary)

## DISTRICT 90 VISION FOR MATHEMATICS INSTRUCTION

- Instruction provides a balance of conceptual understanding and skill development
- Emphasis is placed on multiple solutions to problems
- Students engage in authentic, real world problem-solving
- Instruction provides opportunity for student discourse
- Instruction is differentiated to meet the range of learners



### Five Strands of Mathematical Proficiency: Intertwined strands of proficiency

Strategic Competence
The ability to formulate,
represent, and solve
mathematical problems.

Adaptive Reasoning
Capacity for logical
thought, reflection,
explanation, and
justification

Source: Adding it Up: Helping Children Learn Mathematics, National Research Council

(2001)



Conceptual Understanding
Comprehension of
mathematical concepts,
operations, and relations.

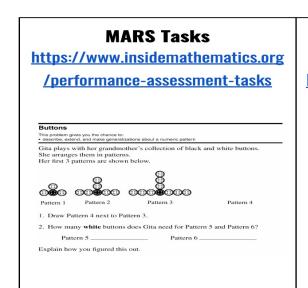
Procedural Fluency
Skill in carrying out
procedures flexibly,
accurately, efficiently, and
appropriately

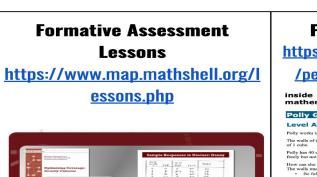
Productive Disposition
Habitual inclination to see
mathematics as sensible, useful,
and worthwhile coupled with a
belief in diligence and one's owr
efficacy.

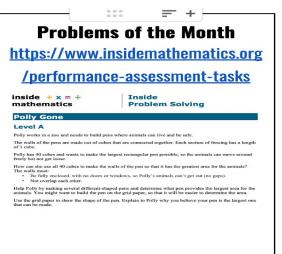
#### District 90 Middle School Mathematics Progressions

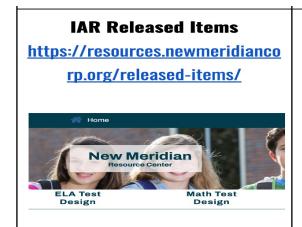
Instructional Progressions	Grade 5	Grade 6	Grade 7	Grade 8
Instructional Math	Content: Grade 5 with modifications	Content: Grade 6 with modifications	Content: Grade 7 with modifications	Content: Grade 8 with modifications
	Materials: Aligned to IEP goals	Materials: Aligned to IEP goals	Materials: Aligned to IEP goals	Materials: Aligned to IEP goals
Grade-Level	Content: Grade 5 Standards	Content: Grade 6 Standards	Content: Grade 7 Standards	Content: Grade 8 Standards
	Materials: Investigations in Number, Data, and Space 3	Materials: Connected Math Project 3 (CMP3)	Materials: Connected Math Project 3	Materials: Connected Math Project 3
ATP-1	Content: Grade 5/6	Content: Grade 6/7	Content: Grade 7/8	Content: Algebra
	Materials: Investigations & CMP 3	Materials: CMP 3	Materials: CMP 3	Materials: CMP 3 + supplements
ATP-2	Content: Grade 6/7	Content: Grade 7/8	Content: Algebra	Content: Geometry
	Materials: CMP 3	Materials: CMP 3	Materials: CMP 3 + supplements	Materials: Discovering Geometry

#### **D90 Mathematics Supplemental Resources**

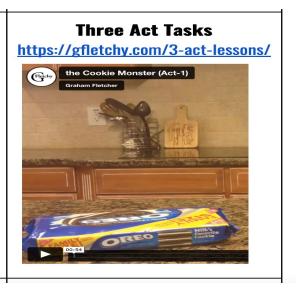






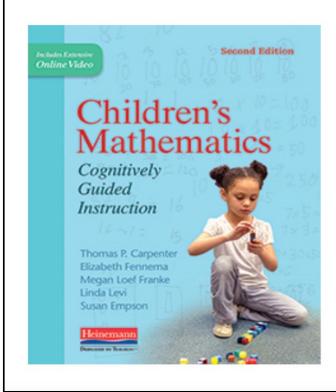




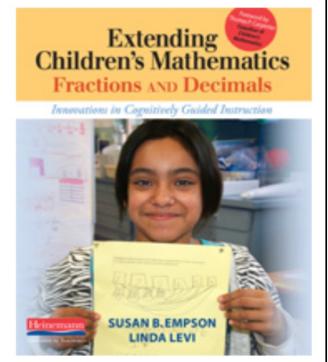


#### Professional Resources for Math Educators in D90

#### Children's Mathematics Cognitively Guided Instruction



# Extending Children's Mathematics Fractions and Decimals



#### **Making Number Talks Matter**



#### **District 90 Math Partners**

#### Silicon Valley Mathematics Initiative

https://svmimac.org/



### **Metro Chicago Mathematics**

https://mcmi.uic.edu/



#### K-8 MATH SUPPORT: BRIDGES INTERVENTION PROGRAM



Identifies students through Multi-Tiered Systems of Support



Targets individual skill development



Aligns math support with classroom content



Monitors student progress over time



Offers core instruction plus additional intervention time

## ROOSEVELT AM MATH ACADEMY

- Before school opt-in math support
- Unit pre- and post-assessments identify students who could benefit
- Facilitated by the Math Department
- Supports skills and concepts currently being taught in the classroom
- Accessible to students as needed
- Progress noted by participating students and teachers

#### MIDDLE SCHOOL SOCIAL STUDIES REVIEW

- Illinois State Board of Education revised Social Science Learning Standards to be inclusive and reflective of all individuals in this country (HB2170)
- Emphasizes inquiry skills and disciplinary concepts (civics, geography, economics, history)
- New conceptual frameworks: Recognizing Perspectives and Articulating Identities and Evaluate the Roles and Systems of Power
- Content area changes: multiple perspectives/viewpoints, diverse perspectives/viewpoints, marginalized groups,
   and underrepresented
- Focus: inquiry-based instruction and expansion of resources to include more diverse perspectives and viewpoints

#### LOOKING AHEAD: CURRICULUM WORK IN PROGRESS

- Elementary and Middle School Science and STEM Pilot
- Middle School Social Studies Curriculum Review
- ATP-2 Math Materials Review
- Phased implementation of Center for Applied Linguistics recommendations for English Learners
- D90 Diversity, Equity, and Inclusion Committee work
- Standards-based unit planning and assessment alignment
- Multi-needs classroom curriculum and instruction



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Thank you!

Questions?