Report of Phase II K-8 Math Subgroup

Goals:

- Determine next steps in planning for Face to Face, Hybrid, or Full Remote Return to School Models
- Enable and empower teachers to create content that will improve student learning outcomes regardless of model, using high-impact teaching practices

*Note: This plan has been developed to account for all three scenarios. We focused primarily on the fully remote scenario as there will inevitably be a need to teach remotely to some or all of our students at some point during the school year. The recommendations allow teachers to teach using the same practices whether in person or remote, creating consistent expectations for students regardless of the scenario.

Executive Summary:

The Phase II Return to School K-8 Math Subgroup has committed to the following work for Phase III following an assessment of assets and needs in Phase II

This work cannot take place without a commitment to distribution of Chromebooks and the use of a common platform for content delivery (recommended: Google classroom and Seesaw) and grading/ attendance (recommended: Aspen)

- Review all Curriculum Maps and update to include SEL and Digital Literacy
- Ensure that outward facing Curriculum Maps are presented in a format that is accessible to all stakeholders
- Identify needs among staff and students for additional training and support in Digital Literacy, via an in-house survey
- Develop and deliver PD for faculty and staff (both synchronous and asynchronous) that enables them to deliver high quality and engaging content to students regardless of model (Face to Face, Remote, or Hybrid)

Task 1: Curriculum Mapping

- Curriculum maps will be updated, with prioritization of the following:
    - Scope and Sequence documents will identify power standards to be addressed at each grade level regardless of scenario.
    - Establishing clear, robust, reasonable expectations for teachers regarding student learning. Maps will include recommendations for lessons to be taught, combined, or made optional for remediation or enrichment, dependent on scenario, based on guidance from MA DESE, Eureka Math, Zearn Math, Achieve the Core, Louisiana Dept. of Ed, and staff expertise.

- Curriculum maps will be housed on public facing website so that LPS families can be informed.
- Working copies will need to be housed internally as well.
- Curriculum maps will be updated with links to lesson resources
- Curriculum maps will need to include the following:
    - Digital Literacy Skills
    - Social Emotional Skills (following the plan from District SEL Return to School Committee)

Task 2: Identifying and Recommending Best Practices for Purposeful and Flexible Learning

- Best practices (From Melanie Kitchen "From Crisis to a Responsive Instructional Approach")
    - Utilize asynchronous learning for recall and procedure
    - Utilize synchronous learning for larger group and small group
    - Utilize Office Hours/ Extra Help for one on one help
    - Record short videos
    - Continue work on providing timely formative feedback
- Utilize appropriate tools
    - Consistent across district
    - Digital and paper based (if possible)
- Build capacity from within
    - Utilize staff expertise with specific tools or strategies for professional development
- Blended learning/flipped classroom model is recommended for all three scenarios
- Utilize team teaching or co-teaching models. Grade level teams within/ across schools collaborate to plan, prepare, and deliver lessons to all students in the same course. Teachers take collective responsibility for all grade level students in their school.
- Create opportunities for vertical teams to meet and develop tasks that incorporate relevant previous grade level material with the on-grade level using the progression of the standard.
- Provide teachers with professional learning opportunities about relevant topics (i.e., Instructional practices, online tools, SEL, remote learning engagement) and collaboratively develop a plan to implement new learning, adjust for students' needs, and monitor for successes.

Task 3: Identifying and Recommending Online and Paper/ Pencil Based Supports

- Identified online supports, shown as table in Appendix.
- Primary Programs must be used by all teachers in order to provide consistency and support a hybrid teaching or remote teaching model effectively.

    - Google Classroom
    - Seesaw
    - Google Suite for Education (Docs, Forms, Sheets, and Slides)
    - Aspen
    - Video Conferencing with Zoom (if funded by district) or Google Meet
- Create and administer a survey to determine staff needs and to plan for PD with these tools.
- We need to keep the capability of leaving certain sites unlocked as what happened during remote learning so that we can decrease the number of help desk tickets.
- Identified non-digital tools. Identify materials for and create individual student kits that include necessary tools to be used in school, or distributed to students if learning remotely.
    - Pencils, pens
    - Colored pencils
    - Highlighters
    - Math Manipulatives
    - Measurement tools
    - Student workbooks

Task 4: Creating a Plan to Create and Push Out Content

The team identified immediate needs, current capacity and next steps.

- Development of content tied to commitment to a common platform and availability of Chromebooks
- Immediate content needs
    - SEL -- refer to district subgroup recommendations
    - Digital Literacy for students
    - Common lessons for all teachers to use to reinforce remote learning skills/digital literacy
- Digital Literacy/ PD for staff
    - Results of staff survey regarding tools will help to inform lesson development.
    - Model online lessons/experiences for teachers to “be the students”
    - Discussion of ideas for delivery (one class at a time, all students in same grade (multiple classes) together, etc.
    - Either time or stipends at the start of year to support development of lessons.
    - Work with district Google Classroom “power users” to support staff synchronously
    - Utilize resources within district to support staff in learning asynchronously

- Develop a portal for math online teaching and learning resources by grade level. This portal will contain links to all recommended resources for planning and implementing effective lessons.
- Utilize Eureka In Sync platform to assign and collect student work digitally.

Task 5: Identifying and Recommending Best Practices in Assessment

Formative Assessment

On-going Daily Formative:

- Accurate
- Specific
- Frequent

Use of Eureka online exit tickets during daily instructional class meetings-4 days per week. Develop tasks that incorporate relevant previous grade level material with the on-grade level material, and inform instruction.

Weekly Formative:
Weekly quiz/computer program completed on non-instructional class meeting day-1 day per week.
Provide teachers with topic quizzes (Affirm, Embarc online)

Summative:
Considerations from NCTM/NCSM Guidance document

- Waive, eliminate, or postpone district assessments that measure student learning at a particular moment in time. (iReady diagnostic assessments can still be used to measure growth over time.)
- All district level assessments need to be carefully reviewed and only those that are demonstrably connected to content and resulting in actions should be used. Any assessment that does not substantially inform instruction should not be used at the expense of time that would otherwise be spent on student learning.
- Support and protect time for teacher collaboration around formative assessment tasks and problems that are focused on the essential learnings.

End of Module assessments need to be reevaluated and modified to match focus standards. Completed during an instructional remote class period. ***Need to determine the usefulness of these assessments***

Digital Assessment Tools:
Benchmark Testing: i-Ready diagnostic assessments can be used initially to identify student strengths and learning gaps, used for instructional planning purposes. Subsequent i-Ready diagnostic assessments can be used to measure student growth over time.

1:1 virtual assessment ideas?

i-Ready standards mastery

Eureka Equip

Eureka Affirm

Zearn

Embarc online

Google forms

Edpuzzle

ST Math

Additional Assessments:
Performance-based assessments that would stretch over several days or maybe a week. Use a platform like flipgrid to present projects. Could create a district shared bank of performance-based assessments.

Appendix

Elementary Online Resources	Middle Online Resources	Assessment	Video Lessons	Online Manipulatives
Seesaw (K-2)	Google Classroom	i-Ready	Eureka Math In Sync	Didax
Google Classroom (3-4)	Eureka Math In Sync	Google Forms	Khan Academy	Toy Theater
Eureka Math In Sync	STMath	Eureka Equip	Zearn	
Zearn Math	Khan Academy	Eureka Affirm	LPS Teacher created	
STMath	IXL Math	Quizlet		
Prodigy Math	Embarc Online	Kahoot		
Embarc Online	Edpuzzle	Padlet		
Flocabulary	Flocabulary			
Brainpop Jr.	Brainpop			
Loom	Envision			
Screencastify	Loom			
Edpuzzle	Screencastify			
Padlet	Gizmos			
Gizmos	Desmos			
	Padlet			

Table of Digital Resources