

ON-GOING BEST PRACTICES IN MATH INSTRUCTION AND DELIVERY

Superintendent's Report and Discussion

June 26, 2018

2017-18 GOAL LANGUAGE

- Lead the action research to assess best practices in delivering intervention, differentiation, and acceleration in math instruction in elementary grades, with an emphasis on upper grades. Review options to provide teachers with maximum support to ensure that differentiated math instruction is provided to all rates and types of learners. Work closely with Elementary Principals, Associate Superintendent of Ed Services, Executive Director Pupil Programs and Services, and 5th and 6th grade teachers to complete the action research and create an implementation plan. Ensure that outcomes are tied to research-based best practices in teaching and learning. Continue to collect and respond to stakeholder feedback regarding math instruction and curriculum, TK – 12.

PROCESS – MEETING DATES AND MINUTES

- Agenda Item at Monthly Elementary Principal Meetings, August 2017-June 2018
- Agenda Item at Instructional Planning Group Meetings, 9/27, 1/31, 4/11
- Full 4 – 6th grade Elementary Math Meeting, November 19, 2017
- Elementary Math Discussion Forum (Design Thinking Model), January 23 and February 26, 2018
- Elementary Math Working Committee Meetings, April 12, April 26, May 10, 2018

OUTCOME LIST FROM DESIGN THINKING MEETINGS - COMMUNICATION

- More frequent, optional parent/teacher conferences
- Maintain/foster strong classroom community
- More opportunities for teachers to talk with parents
- Parent observation of math instruction
- Require conceptual understanding and computational fluency

OUTCOME LIST FROM DESIGN THINKING MEETINGS – INTERVENTION

- Differentiated individualized instruction (D)
- Bringing together kids of similar talent (A)
- More frequent, optional parent/teacher conferences
- Maintain/Foster strong classroom community
- Separate evaluation and measures beyond the CAASPP

OUTCOME LIST FROM DESIGN THINKING MEETINGS - ACCELERATION

- EPGY (D)
- Testing out of material
- Developing an acceleration model
- Math academy model
- Bringing kids together of similar talent
- Gifted/GATE model, pull out
- Cross grade homogeneous grouping in upper elementary
- Middle school instruction at elementary
- Homogeneous grouping in math only
- Accelerated math options, like ELA
- Present advanced material to students
- Offer choice with tracks like at LCHS

OUTCOME LIST FROM DESIGN THINKING MEETINGS - DIFFERENTIATION

- EPGY (A)
- Differentiated individualized instruction
- Parent involvement
- 4-6 grade CSR to improve differentiation
- Math workshop model, flexible per unit
- Mathzilla model: build excitement opportunities for math fun
- Mathzilla and Math Olympiad questions peppered into the regular classroom curriculum
- Identify supplemental materials and use consistently
- Separate evaluation and measures beyond the CAASPP (A)

ELEMENTARY MATH COMMITTEE EXPERIENCE – MEETING #1

- Welcome, Introductions, Review Sup's Goal, Review 2/26 Minutes
- Defining Purpose of Elementary Math Working Committee (Superintendent's Committee; Short-Term Goals and Outcomes (Immediate Needs and Resources); Long-Term Commitments, Purpose, Outcomes
- Some review of proposed outcomes from 2/26; Short-Term Goals and Concerns were shared
- Discussion – Parents, Teachers, Administrators, Board Members reviewed ideas

ELEMENTARY MATH COMMITTEE EXPERIENCE – MEETING #2

- Meeting #2 held on 4/26/18
- Feedback from members to structure into smaller group discussion focusing on one topic; the first suggested topic was: Options for Acceleration
- Agenda:
- Items to be reviewed next by site or district: Parent Ed Opportunities in Math; Communication Strategies; After-School Program Offerings; Resource Materials by Grade level; Differentiation and Intervention Opportunities
- Two Small Group Committees: Acceleration Options – Within the School Day; Acceleration Options Outside the School Day (Shared Docs for Research)

ELEMENTARY MATH COMMITTEE EXPERIENCE – MEETING #3

- There was a brief review of the shared documents from the working committee. Teachers shared data on the numbers of elementary students who teachers at every grade level reported as candidates for intervention and acceleration.
- A specific proposal was put forward by several of the parents to pilot a limited return to homogeneous math groupings in grades 4-6. The pilot would be “opt-in” and offer an accelerated math class at each grade level at each school site. The curriculum would be compacted and cover 4-7 grade material.
- An acceleration option modeled after the Elementary Spanish Program was discussed.
- Every member offered insights and feedback related to the committee process/experience.

ARTICULATED LCUSD STAFF VIEWS AND PERSPECTIVES

- Staff recognized the passionate dedication parents have towards their student's elementary math experience.
- Staff feel that the LCUSD adopted curriculum is strong and is meeting the needs of their learners – over time instructional delivery will only improve.
- The programmatic needs in math according to student numbers call more for investments in opportunities for intervention than for acceleration.
- Teachers are committed to teaching their grade level standards and differentiating.
- Staff are open to designing communication and enrichment opportunities.

SUPERINTENDENT REFLECTIONS

- Appreciation for the engaged dialogue, largely collaborative process between stakeholder groups
- Process did not necessarily adhere to the Superintendent's Goal as written
- Need for communication, transparency, and collaboration between stakeholder groups
- Need to explicate constraints of public education while creatively endorsing providing world class educational opportunities where possible
- The work to refine, improve, and celebrate math instruction across the district will be an on-going effort
- Importance of valuing the integrity of the Elementary Education experience

RECOMMENDATIONS

- Develop Comprehensive Site Plans
 - More frequent parent teacher conferences (formal or informal)
 - Maintain/Foster strong classroom community
 - Parent opportunities to observe math instruction
 - Requirements/recommendations to ensure both conceptual understanding and computational fluency
 - Programmatically defined supplemental materials
- Develop Comprehensive Site Plans
 - Strategic inclusion of Mathzilla and Math Olympiad questions peppered into regular classroom curriculum
 - Explore increased programmatic approach to After-School Enrichment Opportunities
 - Explore Math Camp Program – Opportunities, Needs, and Resources
 - Continue/Develop meaningful Parent Education Opportunities on Math Curriculum

RECOMMENDATIONS

- Explore with Elementary Sites the role and efficacy of an Upper Elementary Math Specialist
- Provide Student Study Team (SST) meetings and plans for qualifying students identified by both the teacher and parent as accelerated/gifted
- Digital Learning Opportunities for Differentiation, Acceleration, and Intervention:
 - EPGY, Redbird, Review and Potentially Purchase DreamBox
 - These opportunities if organized strategically will provide opportunities for more homogeneous math instruction within the mixed ability grouping format

DISCUSSION AND NEXT STEPS

- Discussion: Governing Board
- Strengths and Concerns Related to Goal, Outcomes and Recommendations
- Direction
- Direction from Governing Board Regarding Next Steps
- Elementary Math Working Committee – Meeting to Report Out