

Math Working Committee Minutes #2

April 26, 2018

Governing Board Room

In attendance: Tuan Do, William Schulze, Alphan Altinok, Ajay Perumbeti, Stacey Boland, Sunyoung Fahimi, Anna Hasbun, Jane Chang, Debbie Au, Karen Hurley, Anais Wenn, Marie Morin, Christine Matthews, Lori Arbucci, Mandy Redfern, Debra Craddock, Wendy Sinnette, Ellen Multari, and Brent Kuszyk.

1. Wendy welcomed the committee and thanked them for communicating their thoughts with her via email regarding these math working meetings.
2. Wendy reviewed the structure for today's meeting and mentioned that the parents on the committee had reached out to her and asked that due to the limited time the meetings focus on two topics: acceleration within the school day and acceleration outside the school day. Other topics such as parent ed opportunities, communication strategies, after-school program offerings, resource materials, etc. can be reviewed next year by site/district staff and administration.
3. The large committee discussed the format and agreed that working in smaller groups would be more productive. Prior to breaking into smaller groups, the large group discussed several topics.
 - a. Parents expressed continued interest in developing plans to provide formal acceleration opportunities for students at the elementary level.
 - b. Math Olympiad has received positive comments by families, however acceleration is difficult with the larger group sizes. There is also concern that among the Math Olympiad students, there is a range of abilities among the students, some are ready for high school math while others are only 1-3 grade levels ahead.
 - c. A parent noted bolstering the math opportunities could lead to more female students continuing with higher level math and STEM.
 - d. A teacher shared challenges in supporting students who struggle with math and that they are just as important as those who perform above grade level. Wendy reminded the group that we want to look at all possibilities, but temper that with understanding that as a public school district we serve all students.
 - e. A parent mentioned that generally 65% of students in LCUSD are exceeding grade level standards based on CAASPP data and are ready for more advanced instruction. He added that some parents feel like their children are not challenged. There was some discussion about the social/emotional effects of ability level based classes. An administrator cautioned that students that performed in the upper band of CAASPP are at or above standards for the grade level, however, it should not be assumed that they are functioning beyond the teachers' abilities to differentiate.
 - f. A parent added that the math program should meet everyone's needs. Acceleration seems to keep coming up and should be considered, and teaching ability level based classes could help all students.

- g. The teachers discussed the composition of their current classes and most teachers stated the number of students performing significantly above their peers varies each year; however, the average number is typically 2-3.
 - h. A teacher shared that she asked her students about being in homogeneous groups versus heterogeneous groups. The teacher reported that the students said they liked both configurations; but don't want to be with like ability peers all the time. The teacher shared her interpretation was that it needs to be fluid depending on the assignment.
 - i. A teacher brought up research for grades 6-12 and who is going to make it to the highest levels of math. The research said that there weren't any significant gains for high achieving students when in classes with like abilities, but there was statistically significant gains for lower achieving students. A parent asked that the committee do more research and that all members should have access.
 - j. A teacher shared she sees her primary job is to build up character skills in all students - patience, openness, etc. and while we want to give them what they need, and that students have access to any pathway appropriate to their level in grades 7-12.
 - k. A parent said teachers put a lot of effort into their teaching and that Redbird is the answer for some higher achieving students; however, it's an online course and it's not enough. Kids learn better together in a social setting which is missing from Redbird and ultimately becomes demotivating.
 - l. A parent shared that our K-6 configuration limits middle school opportunities for 6th graders that K-5 schools are not constrained by.
4. Jim Carnal gave a quick overview on the math pathways at LCHS.
- a. With the advent of new standards, school districts were given the choice of following an integrated or traditional approach to aligning courses. The LCHS math faculty, supported by LCHS site administration, determined to follow a traditional path for the college preparatory, grade level pathway. The courses were organized into a progression of Algebra I, Geometry, Algebra II, and PreCalculus, following the standards outlined in California math framework. The names of the courses were changed to LC Math 1-4, with LC Math 1 covering the Algebra I standards, LC Math 2 covering the Geometry standards, LC Math 3 covering the Algebra II standards, and LC Math 4 covering the remaining advanced math standards associated with a traditional precalculus class. The courses that comprise the advanced pathway are part of a compaction of curriculum. This means that the course called LC Math 1 Advanced examines the Algebra I standards in addition to approximately one-third of the standards in Algebra II. Across each of the three courses in the advanced pathway, students engage in a compaction so that they are able to enroll in Calculus in their senior year.
 - b. A parent shared that the new math class names are not helpful to parents because they do not describe what is being taught in those classes. The district could do a better job of communicating to parents about the content of those classes. Mr. Carnal explained that the University of California approved course list, viewable at UC Doorways, lists the current titles of LCHS math classes and transcript abbreviations which indicate the alternative title of the math class. The example of this is seen with LC Math 1, the UC approved class, which is also seen as Algebra I on the UC college preparatory course list.

- c. There was consensus that the work this committee does should be in alignment with and support the math pathways at LCHS.
 - d. At the 7/8 school, students who are performing above grade level will be given the opportunity to test and if performing at 80% or above may be placed into higher grade level math classes. Students can accelerate through the 7/8 math and enter Advanced LC Math 1 Advanced with 9th graders. Students that accelerate quickly through the math pathways at LCHS in 10th or 11th grades, will need to go into community colleges to take collegiate level applied math courses since the highest level of math taught at LCHS is AP Calculus.
5. The large group broke into two smaller groups.
- a. Group 1 (Wendy, Brent, Jim, Ajay, Stacy, Marie, Debra, and Jane) looked at possibilities for acceleration outside the school day. There could be more options after school than during the day and could also be less expensive. A parent shared a concern that Redbird is isolating for students. Group 1 discussed the following options to investigate further, with parent interest in prioritizing the underlined options (options i-v).
 - i. After-school math lab/course at LCHS - 3-4 days a week, teaching based on a set curriculum and support students' understanding of 7/8 math. This model would have a certificated teacher teaching the class (the cost would be 0.2 FTE or about \$15-\$20K per year). Top 25 students across the district get in. Parents would have the responsibility for transportation. This option may be an interest for many, but not all families.
 - ii. Could we create a pull out math lab/tutoring during the day for both ends of the spectrum? A lab/tutoring model could utilize online programs as well as a staff member to work with small groups of students. Example: 2 high students and 2 low students from 4 classes in a grade would go to the lab at the same time. Parent volunteers could be used to support instruction and/or work with students on the computers. Cost for this at once a week, grades 4-6 would be about 0.2 FTE or about \$15-\$20K per year, per site (about \$60K for all three sites). Students would forgo math instruction to participate on the days they go to the lab/tutoring. There was some concern about students missing instruction. Space and scheduling issues would also be challenging. Once a week may not be enough to make significant gains.
 - iii. Can we accelerate in 6th grade? More info needed for parents to know what students need to make it into higher level math pathways in high school. Two levels of acceleration - one fast, rapid path; the other a slower, methodical pace would be ideal.
 - iv. Reduce barriers at sites for groups to come support students on campus after school.
 - v. Can we use some of the EB/LB time to focus on math? Students in grades 4-6 are required to be in school for a longer day than students in grades 1-3. The district is limited by contractual day for teachers.
 - vi. Discussion ensued about offering an enrichment math class that would follow the Spanish teacher's schedule. Students could opt into a math enrichment in lieu of Spanish or PE. Parents would have to choose. Students would have to qualify into it like they do with GATE (Cost would be about \$100K or 1.0 FTE for a certificated rotating teacher).
 - vii. Can we use Collaboration days for a workshop/lab environment? If we use Collaboration days, a workshop/lab would be needed at each site to ensure equity of access. Messaging

to parents about the intention of this model would have to be targeted as we don't want it to become a provider of daycare. Thematic experiences could be designed for students to engage in based around next grade level's standards or key ideas. Teachers could think of ideas or topics of what students would benefit from to do as extension project (i.e. ratios for 6th grade) for this model.

- viii. Can we utilize LCFEF grants to mobilize resources?
- ix. We should start a Google doc for ideas, costs, and questions to think about. The Google doc can be accessed by clicking on - [Outside of Class Acceleration Opportunities](#)
- b. Group 2 (Ellen, Anais, Karen, Lori, Christine, Debbie, Joshua, Jim, Sunyoung, Alphan, William, Anna, Tuan, and Mandy)
 - i. This group considered acceleration options within the school day. It was suggested to create a shared [Google doc](#) and have the committee members document their work for all to see prior to the May 10th meeting. The topics they agreed to explore were: parameters/limitations in a public school system, other districts' programs for acceleration at elementary level, reviewing the research done in 2013-14 school year by the teachers and administrators in LCUSD regarding upper elementary math program, research on traditional acceleration, homogeneous groups/cohort based acceleration, grade level placement based on ability level, math lab/specialist to be shared among the 3 sites, homogeneous groupings based on unit assessments with parents helping with small group instruction, and number of students performing above grade level at each site.

The meeting adjourned at 5:25 p.m.