

Board Office Use: Legislative File Info.	
File ID Number	20-0803
Introduction Date	5/13/20
Enactment Number	20-0831
Enactment Date	5/27/2020 os



Memo

To Board of Education

From Kyla Johnson-Trammell, Superintendent
Sondra Aguilera, Chief Academic Officer
Wesley Jacques, Executive Director, Academics and Instructional Innovation Department

Board Meeting Date
May 13, 2020

Subject

- (A) Curriculum Adoption for Grades 9-12 Math
 - Illustrative Mathematics (IM) for Algebra 1, Geometry, and Algebra 2
 - The Practice of Statistics 6th edition for AP Statistics
- (B) Purchase Agreement for Grades 9-12 Math Instructional Materials

Action Requested and Recommendation

Approve (a) *Illustrative Mathematics (IM)* Instructional Materials Adoption for Algebra 1, Geometry, and Algebra 2 and (b) Agreement with IM certified partner Kendall Hunt for the Period May 13, 2020 - June 30, 2021, in an amount not to exceed a total of \$258,792.81 for the Purchase of Instructional Materials Related Thereto.

Approve (a) The Practice of Statistics 6th edition Instructional Materials Adoption for AP Statistics and (b) Agreement with Bedford, Freeman, and Worth Publishing Group for the Period May 13, 2020 - June 30, 2021, in an amount not to exceed a total of \$54,947.15 for the Purchase of Instructional Materials Related Thereto.

Background

Development of the OUSD Core Curriculum began in 2011, when the Common Core State Standards had been the adopted standards of the state for a little more than a year and the state mathematics framework had not yet been written. The curricular materials commercially available at the time did not yet substantially align to the new standards and the shifts in learning and teaching that those standards represented. Recognizing that students and teachers needed different materials as they worked to make sense of the Standards for Mathematical Practice and changes in how and when key concepts were introduced in CCSS, Oakland embarked on a multi-year effort to develop a set of materials that would align with the CCSS-M. This work, organized by the central office math team, engaged expert advisers from beyond the district as well as a broad cross-section of Oakland middle and high school math teachers. Curriculum production work served as an important professional learning opportunity for participating teachers to unpack and understand the demands of the new standards, while also producing curricular materials that would support all teachers in the transition.

Now, a much wider array of curricular products are available from commercial vendors. In some cases materials that existed prior to 2010 have been revised and reworked to align to the new standards. Other materials have been newly created in response to the Common Core State Standards. New materials continue to come to market, and independent



organizations such as EdReports have undertaken reviewing instructional materials in relation to standards. In this context, Academics & Instructional Innovation was charged with leading an Instructional Materials Review in spring 2019 to identify curricula that will best support OUSD students in learning the standards.

Selection Process

District math leaders in the department of Academics & Instructional Innovation have concluded a 2-year process of instructional materials review and piloting with extensive participation from OUSD teachers and principals, as well as members of the community.

Academics & Instructional Innovation began engaging with the Oakland high school math community around adopting materials for high school math courses in Fall 2018. Working under the charge to make a curriculum recommendation to the Interim Superintendent and Board of Education in time for adoption and purchase for use starting in fall 2020, Academics & Instructional Innovation solicited applications from teachers to join a Mathematics Instructional Materials Review Committee and began surveying district stakeholders about what they most wanted in an adopted primary math resource. The Mathematics Instructional Materials Review Committee narrowed a list of more than 8 different curricula to two finalists, each of which had significant strengths when evaluated against alignment to the Common Core State Standards, local criteria for instructional materials and the OUSD Vision for Mathematics. After considerable analysis, reflection, and discussion, the committee voted to pilot CPM and Illustrative Mathematics (IM) for the 2019-20 school year. Our AP Statistics teachers voted to recommend adoption of the most recent edition of the current adopted textbook: The Practice of Statistics. For the 2019-20 school year, teachers piloted The Practice of Statistics 6th edition, awaiting the opportunity in Spring 2020 to recommend The Practice of Statistics 6th edition alongside the curriculum recommendation for other courses.

In Fall 2019, all teachers were invited to participate in a curriculum pilot where they could choose to pilot at least one unit from each finalist curricula: CPM and IM. 26 teachers representing 8 different schools, including two alternative education schools, piloted at least one unit from each curricula. The pilot cohort participated in two full-day curriculum trainings (one for each curricula), and met every 2nd Wednesday for course team collaboration and to share feedback on the pilot curricula.

On April 15, 2020, the pilot cohort unanimously voted for Illustrative Mathematics (IM) for courses Algebra 1, Geometry, and Algebra 2 and The Practice of Statistics 6th edition, paired with a robust professional learning plan, is a product that will support Oakland students' learning aligned to the expectations of the Common Core State Standards and the OUSD Vision for Mathematics.

Competitively Bid

Was this contract competitively bid? No

If no, exception: Kendall Hunt is a certified partner with IM. We compared costs of other certified partners, and Kendall Hunt offered the best price.

Fiscal Impact

Funding resource(s): 0005/Central Office Supplemental



Attachments

- Attachment A: OUSD High School Math Curriculum Proposal
- Attachment B: Budget Proposal for Instructional Materials
- Attachment C: Budget Proposal for Ongoing Professional Learning
- Attachment D: Agreement Between OUSD and IM certified partner Kendall Hunt
- Attachment E: Agreement Between OUSD and Bedford, Freeman, and Worth Publishing Group

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**RESOLUTION OF THE BOARD OF EDUCATION OF THE
OAKLAND UNIFIED SCHOOL DISTRICT
RESOLUTION NO. 1920-0223**

**SELECTION AND PURCHASE OF INSTRUCTIONAL
MATERIALS: HIGH SCHOOL MATHEMATICS**

WHEREAS, pursuant to Board Policy 6161.1, the Governing Board is responsible for selecting textbooks and other instructional materials for use in District schools; and

WHEREAS, the State Board of Education has approved standards for curriculum, certain curriculum frameworks, and has approved a list of basic instructional materials for use in 9th through 12th grade; and

WHEREAS, the Governing Board shall select instructional materials for use in grades 9th through 12th grade or shall have otherwise determined which instructional materials align with the state academic content standards; and

WHEREAS, the Governing Board shall select instructional materials for grades 9-12 upon determining that the materials are:

- Aligned to applicable academic content standards;
- Are provided by publishers that comply with legal requirements;
- Do not reflect adversely upon persons because of their race or ethnicity, gender, religion, disability, nationality, sexual orientation, occupation, or other characteristic listed in Education Code 220, nor contain any sectarian or denominational doctrine or propaganda contrary to law;
- Reflective of California’s multicultural society, avoid stereotyping, and contribute to a positive learning environment;
- Are accurate, objective, current, and suited to the needs and comprehension of district students at their respective grade levels;
- With the exception of literature and trade books, use proper grammar and spelling;
- Do not expose students to a commercial brand name, product, or corporate or company logo unless the Board makes a specific finding that the use is appropriate;
- Support the district's adopted courses of study and curricular goals;
- Contribute to a comprehensive, balanced curriculum;
- Demonstrate reliable quality of scholarship as evidenced by;
- Provide for a wide range of materials at all levels of difficulty, with appeal to students of varied interests, abilities and developmental levels;
- Include materials that stimulate discussion of contemporary issues and improve students' thinking and decision-making skills;

- Contribute to the proper articulation of instruction through grade levels;
- Have corresponding versions available in languages other than English as appropriate;
- Include high-quality teacher's guides;
- Meet high publishing standards in terms of the quality, durability and appearance of paper, binding, text and graphics;
- Upon adoption of standards by the SBE, not exceed maximum textbook weight standards;
- Meet the standards for social content that portray in a realistic manner democratic values, cultural pluralism, and the diversity of the state's population, and emphasize people in varied, positive, and contributing roles; and

WHEREAS, as summarized in Attachment A, instructional review committees comprised predominantly of teachers, teacher leaders and central office content specialists, with the majority of the participants being teachers, reviewed instructional materials for potential use in District schools and found the following to meet the standards for adoption. Therefore, the following instructional materials are recommended for adoption by the Governing Board: Illustrative Mathematics (IM) and The Practice of Statistics 6th edition; and

WHEREAS, expenditures, pursuant to an Agreement between the District and Kendall Hunt Publishing Company, and the District and Bedford, Freeman, and Worth High School Publishers, shall not exceed the total amount of \$313,739.96, for the period May 13, 2020 to June 30, 2021, for the purchase of high school math instructional materials related thereto;

NOW, THEREFORE, BE IT RESOLVED that the Board of Education hereby finds that the instructional materials listed in Attachment A meet the standards for adoption and hereby selects the instructional materials listed in Attachment A for use in District schools; and

BE IT FURTHER RESOLVED that the Board approves the Agreement between the District and Kendall Hunt Publishing Company, Dubuque, LA, in an amount not to exceed \$258,792.81 (Attachment D), and the Agreement between District and Bedford, Freeman, and Worth High School Publishers, Gordonsville, VA, in an amount not to exceed \$54,947.15, (Attachment E), for the term May 13, 2020 through June 30, 2021, respectively, for the purchase of high school math instructional materials related thereto; with the price quote issued by Kendall Hunt and Bedford, Freeman, and Worth, as well as each's pricing list, is included collectively within Attachment B, with the stated costs of purchases of the materials pursuant to the quotes/pricing list and the Agreements as follows:

Vendor	Qty	Description	Total Price
Kendall Hunt	8,370	Student Workbooks	\$190,686.30
	105	Teacher Guides	\$8,033.70
	95	Classroom Kits	\$20,614.50
Instructional Materials Subtotal			\$219,334.50

Estimated Tax and Shipping			\$39,458.31
Total for 2020/21			\$258,792.81
Bedford, Freeman, and Worth Publishing Group	275	Student Text Book	\$53,869.75
	10	Teacher Guides	\$0
Instructional Materials Subtotal			\$53,869.75
Estimated Tax and Shipping			\$1,077.40
Total for 2020/21			\$54,947.15

Passed by the following vote:

PREFERENTIAL AYE: Student Directors: Smith-Dahl and Garibo

PREFERENTIAL NOE: None

PREFERENTIAL ABSTENTION: None

PREFERENTIAL RECUSED: None

AYES: Roseann Torres, James Harris, Jumoke Hinton Hodge, Gary Yee, Aimee Eng, Vice President Shanthi Gonzales, President Jody London

NOES: None

ABSTAINED: None

RECUSED: None

ABSENT: None


CERTIFICATION

We hereby certify that the foregoing is a full, true and correct copy of a Resolution passed at a Regular Meeting of the Board of Education of the Oakland Unified School District, held on May 27, 2020.

OAKLAND UNIFIED SCHOOL DISTRICT

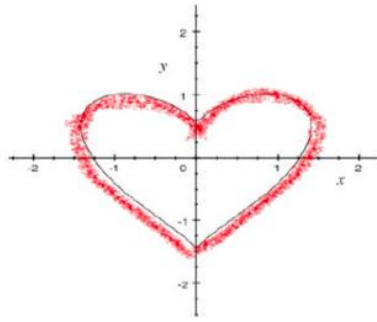


Jody London
President, Board of Education



Kyla Johnson-Trammell
Superintendent and Secretary, Board of Education

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**Attachment A:
High School Math
Curriculum Proposal**

Oakland Unified School District

May 2020

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Executive Summary

In Spring 2018, the Academics & Instructional Innovation team and the high school math community were charged with selecting instructional materials for adoption and purchase for the 2020-21 school year. The Mathematics Instructional Materials Review Committee, composed of a group of teachers, began work in Fall 2018 to review and identify materials that would best support OUSD high school students in learning mathematics as described in the CCSS-M. The committee's review was based on evaluation of printed and online materials against local criteria, third-party analyses, and interviews with implementers in other districts. In Spring 2019, the committee recommended classroom-based piloting of instructional units for the two finalist curricula for Algebra 1, Geometry, and Algebra 2 - CPM and Illustrative Mathematics (IM) - and The Practice of Statistics 6th edition for AP Statistics.

In 2019-20, 26 teachers representing 8 of our high schools participated in the curriculum pilot. In April 2020, pilot teachers unanimously voted to recommend Illustrative Mathematics (IM) adopted as our high school math curriculum for Algebra 1, Geometry, and Algebra 2, and the Practice of Statistics 6th edition as the adopted curriculum for AP Statistics. The newly adopted curriculum will be implemented district-wide starting 2020-21.

2018-19 Materials Review

Context of the spring 2019 materials review

In 2009, Oakland Unified adopted texts for use in math classrooms K-12 in the district. These texts were aligned to the then-current Mathematics Content Standards for California Public Schools, which had been adopted by the state Board of Education in 1997. The texts adopted in 2009 remain the official district-adopted math texts for Oakland high schools today, in spite of the fact that California adopted the Common Core State Standards (California Common Core Standards) in 2010. For the last six years, Oakland Unified School District high school math teachers have been guided by the California Common Core Standards and the OUSD Core Curriculum as they plan learning experiences for students for Algebra 1, Geometry, and Algebra 2. Teachers in upper level math courses continue to use the 2009 textbooks or create their own curriculum.

Development of the OUSD Core Curriculum began in 2011, when the Common Core State Standards had been the adopted standards of the state for a little more than a year and the state mathematics framework had not yet been written. The curricular materials commercially available at the time did not yet substantially align to the new standards and the shifts in learning and teaching that those standards represented. Recognizing that students and teachers needed different materials as they worked to make sense of the Standards for Mathematical Practice and changes in how and when key concepts were introduced in CCSS, Oakland embarked on a multi-year effort to develop a set of materials that would align with the CCSS-M. This work, organized by the central office math team, engaged expert advisers from beyond the district as well as a broad cross-section of Oakland middle and high school math teachers. Curriculum production work served as an important professional learning opportunity for participating teachers to unpack and understand the demands of the new standards, while also producing curricular materials that would support all teachers in the transition.

Eight years later, the OUSD Core Curriculum for Algebra 1, Geometry, and Algebra 2 is a robust set of materials organized around key tasks in each unit. Materials include guidance for teachers in structuring learning experiences to engage all students in opportunities for academic discussion about mathematics and in supporting students in productive struggle. Materials also include specific guidance to engage learners with particular needs in accessing each lesson. These materials were not formally adopted by the Board of Education, however.

Now, a much wider array of curricular products are available from commercial vendors. In some cases materials that existed prior to 2010 have been revised and reworked to align to the new standards. Other materials have been newly created in response to the Common Core State Standards. New materials continue to come to market, and independent organizations such as EdReports have undertaken reviewing instructional materials in relation to standards. In this context, the Academics team was charged with leading an Instructional Materials Review in spring 2019 to identify curricula that will best support OUSD students in learning the standards.

The materials review process, leading to a recommendation:

The Academics team began engaging the Oakland high school math community around adopting materials for high school courses in fall 2018. Working under the charge to make a curriculum recommendation to the Interim Superintendent and Board of Education in time for adoption and purchase for use starting in fall 2020, the Academics team solicited applications from teachers to join a Mathematics Instructional Materials Review Committee and began surveying district stakeholders about what they most wanted in an adopted primary math resource. What follows is a timeline of stakeholder engagements in this materials review process.

Date	Activity
Fall 2018	The Academics team began engaging the Oakland high school math community around adopting materials for high school math in November 2018. The Academics team solicited applications from teachers to join a Mathematics Instructional Materials Review Committee and began surveying district stakeholders about what they most wanted in an adopted primary math resource.
Winter 2018	Interview districts in neighboring communities and across CA to learn about their curriculum experiences Begin identifying materials for review Contact publishers to get review copies of materials
January 2019	Recruit members for Math Instructional Materials Review Committee (MIMRC)
December to February 2019	Solicit input on Instructional Materials Review Criteria via survey from teachers, Teacher Leaders, site administrators, central office leaders
February 2019	Notify Committee members of acceptance The Academics team received 28 applications from teachers to be on the Mathematics Instructional Materials Review Committee (MIMRC). All applicants were accepted who could attend at least three of the four scheduled meetings, and were planning on returning to OUSD in the following school year. The final decisions of the committee represented the consensus of 25 individuals.
March 12, 2019	Math Instructional Materials Review Committee Meeting #1 <ul style="list-style-type: none"> ● Review process and responsibilities ● Review of CCSS shifts and exploration of standard progression across courses
March 19, 2019	MIMRC Meeting #2 <ul style="list-style-type: none"> ● Finalize criteria for evaluation ● Explore three curriculum programs: Illustrative Mathematics (IM), Mathematics Vision Project, and Big Ideas Math
April 9, 2019	MIMRC Meeting #3 <ul style="list-style-type: none"> ● Study criterion for evaluating curriculum alignment to rigor, as defined by the Common Core shifts ● Explore an additional curriculum program: CPM ● Narrow our list to 2-3 curricula that we would like to continue to consider
April 16, 2019	MIMRC Meeting #4 <ul style="list-style-type: none"> ● Explore the CA Math Frameworks for our course options beyond Algebra 2, and determine next steps for those courses ● Narrow our list to 2 curricula that we would like to pilot: CPM and IM ● Request to continue curriculum review next year for upper math courses ● Brainstorm recommendations for a pilot process
April 2019	High school community received an update regarding the results of the MIMRC pilot recommendations
April 2019	Engage with Academics and ELLMA colleagues around finalist curricula

The Academics team received 28 applications from teachers to be on the Mathematics Instructional Materials Review Committee (MIMRC). All applicants were accepted who could attend at least three of

the four scheduled meetings, and were planning on returning to OUSD in the following school year. The 25-member committee included:

- Teachers from 9 different schools, including one K-12 school and one 6th-12th grade school
- 19 teachers currently teaching Algebra 1, Geometry, and Algebra 2
- 13 teachers currently teaching upper level math courses
- 3 teachers currently teaching an Algebra 1 support class
- 3 individuals who coach or teach a CTE course
- 3 individuals who spend at least part of their day coaching
- 3 individuals with between 1-2 years of teaching experience
- 10 individuals with between 3-5 years of teaching experience
- 6 individuals with 6-8 years of experience
- 9 individuals with more than 8 years of experience
- Teachers with experience teaching students with special needs, English Language Learners, newcomers and students identified as GATE in their classes.
- Individuals with experiencing integrating technology into their teaching practice
- Individuals with expertise in assessment
- Individuals with experience supporting new teachers.

The Academics team structured the process to focus on a review of printed and online materials for the first year of instructional materials review, with the intention of gathering information through a classroom pilot in the following school year. To help to bring additional perspectives into the review, the Academics team also gathered and shared published reviews from EdReports.org, interviews with math leaders in 18 districts regarding their adopted curriculum and classroom experiences, and interviews with colleagues in districts that partner with OUSD through Math in Common about their recent experiences with materials reviews.

To establish criteria against which to evaluate materials, the Committee drew from a survey of teachers, site and central office leaders about the features they valued in instructional materials as well as from the review tools published in the CCSS Mathematics Curriculum Analysis Project supported by the Council of Chief State School Officers. 13 teachers and 4 site administrators responded to the survey. The final categories for evaluation included:

- Common Core Aligned Rigorous Tasks
- Lesson & Unit Design
- Differentiation
- Usability
- Additional Considerations

Each category included specific criteria for evaluation. The first category, Common Core Aligned Rigorous Tasks, included alignment to content standards and Standards for Mathematical Practice, and carried the most weight. Lesson & Unit Design included considerations about whether the materials would support learning experiences aligned to the OUSD Vision for Mathematics, including students engaged in academic discourse and active sense-making about mathematics. Differentiation and Usability were equally weighted.

Evaluation of Materials

The Committee began with an initial list of 8 curricula, identified through EdReports.org, the California Department of Education’s list of State Board adopted materials, and materials in use in nearby and partner districts. The MIMRC eliminated a number of curricula for not adequately meeting the criteria identified through the community survey. From the initial list, the MIMRC selected several sets of materials for deeper examination based on their alignment to local criteria. Among those were several that had important strengths, but which after greater scrutiny the committee determined were not strong matches for OUSD. Those curricula included:

Eureka Math
Big Ideas Mathematics, published by Houghton-Mifflin Harcourt
HMH AGA Series, published by Houghton-Mifflin Harcourt

Another three programs were identified as the most strongly aligned to the CCSS-M, local criteria, and the OUSD Vision for Mathematics among the materials reviewed. Those materials: Mathematics Vision Project (MVP), CPM, and Illustrative Mathematics (IM) were identified as a short list of materials to share with a broader community. Additional information about the Committee’s analysis is included below.

In lieu of Open Houses, the Academics team chose to leverage the strong site-based math team relationships and engage with teacher leaders around instructional materials review updates. Many teacher leaders were part of our instructional materials committee, and brought the reflections of their team members into our meeting spaces. The voices of many teachers, beyond committee members, are represented in the analyses below.

Mathematics Vision Project (MVP)

Mathematics Vision Project (MVP) was developed by a group of educators in Utah to address the mathematical shifts of focus, coherence, and rigor. The materials are made available to other states as an Open Educational Resource.

A summary of the strengths and weakness identified by the Committee appear here:

MVP Strengths	MVP Weaknesses
<ol style="list-style-type: none"> 1. There is a clear lesson design sequence. 2. The emphasis on procedural skills allows students to access other problems. 3. There is a clear emphasis on small group work. 4. Most of the problems are contextualized and the curriculum design has an inquiry based approach. 5. Online support for students includes videos. 6. Homework is provided that is aligned to lessons. 	<ol style="list-style-type: none"> 1. Problems have unnecessarily difficult contexts, and are text-heavy. This could be a barrier for many students. 2. Numbers chosen for many problems are whole numbers, which is not as rigorous as the standards demand. 3. Utah has some different standards that they have adopted on top of CCSS. This is not in alignment with our CA standards. 4. The current MVP website is not user-friendly for teachers or students.

We interviewed local school districts, including Berkeley Unified, San Lorenzo, and Oceanside, who have adopted MVP. The High School Math Specialist for San Lorenzo Unified School District shared that some of the strengths that teachers found in MVP was that standards were spiraled within and across courses, which allowed students to continue to practice concepts over time. Teachers also

appreciated the self-assessments and exit tickets that were included. Many teachers, however, reflected that MVP is hard to teach, particularly for beginning teachers. It is hard to see where the unit is going until you have completed the full unit. While the daily formative assessments for students are useful, the unit assessments were not.

CPM

CPM is a nonprofit educational consortium that offers a mathematics program for middle and high school courses (6th grade through Calculus). CPM began more than 25 years ago as a grant-funded mathematics project bringing together middle and high school teachers and university professors to write textbooks to help students understand mathematics.

CPM is currently a supplementary instructional material in OUSD Algebra 1 classrooms; select lessons are integrated into the OUSD Core Curriculum, and teachers have access to class sets of books as well as the Teacher’s Edition. CPM lessons are often organized for students to interact with peers in study teams to complete problems. The committee identified specific strengths of the program, leading it to be one of the two finalists under consideration:

CPM Strengths	CPM Weaknesses
<ol style="list-style-type: none"> 1. There is a high language demand to access problems. 2. The curriculum is discovery based, and students develop ideas from prior knowledge. 3. The Parent Guide is an added resource (summary of lesson and practice). 4. The shifts to CCSS show up clearly. 5. There is a strong theme in each unit that could support students' understanding of concepts. 6. The curriculum is closely aligned to OUSD values around collaboration & math discussion 7. The teacher notes provide useful strategies for engagement and differentiation. 8. The online teaching portal is a helpful support. 9. There is an intentional use of algebra tiles, which is a meaningful kinesthetic & visual support for students.. 10. There is a built in test bank. 11. CPM offers curriculum for upper level math courses as well. 	<ol style="list-style-type: none"> 1. There is a high language demand to access problems. 2. Student materials are not user-friendly. 3. Student materials are not easily editable for differentiation or modification.

In their review of language supports in the CPM text, the ELLMA office identified that overall the language supports in the program were not robust, and the guidance for supporting English Learners in the front matter of the Teacher’s Edition is dated. The supports outlined in that section are also most appropriate to students who are newcomers, rather than long-term English learners. While there were some effective strategies embedded in lessons, they did not see specific language supports such as language stems embedded into lesson descriptions. However, they did identify that the focus on interaction and discourse in the program overall means that language supports would not be separated from mathematics learning.

Although teachers in the district have some experience with individual lessons and series of lessons from using CPM as a supplementary text, we sought additional information from local districts who are using CPM as their primary instructional materials. The Secondary Math Curriculum Specialist in Santa Ana shared that they are in their second year of adopting CPM for all secondary schools through Algebra 2. “As with any instructional tool, there are holes that need to be addressed. However, we can find other supports to fill-in a standard or more skill practice. What we can’t necessarily always find or create is how to introduce/strengthen a topic through conceptual understanding. CPM is very strong in this area.” The math coach at Lighthouse Charter also shared that their teachers enjoy using CPM, but it requires regular collaborative time for teachers to norm on group work practices and plan for instruction.

Additional challenges districts encountered include wrestling with pacing, and the shift in the nature of mathematics instruction. One interviewee noted that the materials are most effective when students are working collaboratively, but fall flat when students are left to work independently.

Illustrative Mathematics (IM)

The Illustrative Mathematics (IM) curriculum was created through a partnership between the K-12 OER Collaborative and Illustrative Mathematics. The K-12 OER Collaborative is an organization dedicated to increasing the quality and effectiveness of K–12 instructional materials while substantially reducing their cost to school districts. Illustrative Mathematics, founded by mathematician and CCSS-M author William McCallum, is a non-profit that provides tasks, lesson plans, and resources to teachers, assessment writers, and curriculum developers. Through a competitive RFP process, Illustrative Mathematics was selected to create 6th-8th grade math materials for the K-12 OER Collaborative that will be openly licensed for use by educators.

IM received a perfect score on EdReports, higher than the other curriculum programs that we considered. The instructional materials review committee also selected IM as its finalist, based on significant strengths:

IM Strengths	IM Weaknesses
<ol style="list-style-type: none"> 1. The instructional materials and teacher guide are easy for a beginning teacher to use and make sense of. 2. Problems ask students to offer justification and reasoning. 3. Lesson descriptions include prior knowledge and standards it is building towards (coherence) 4. Student materials are available as both a PDF and an editable word document, which allows for differentiation and personalization of instruction. 5. Statistics standards are embedded into each course. 6. The unit design has a clear storyline, and the progression of learning within and across units is clear. 7. There is Algebra 1 Support curriculum aligned to the Algebra 1 course. 8. With the middle school adoption of IM, we have the potential for 6-Alg2 alignment 	<ol style="list-style-type: none"> 1. The committee was not able to name weaknesses, however have questions for the pilot cohort to explore in regards to how balanced the curriculum is in regards to mathematical rigor: procedural fluency, conceptual understanding, and application.

In this program, the ELLMA office identified stronger, more integrated supports for English learners. They noted that the text uses the same language and strategies that ELLMA currently uses with OUSD teachers across content areas, evidence of the partnership between IM and the Stanford EL office. ELLMA office colleagues appreciated that the program integrated a limited number of common strategies throughout the units, and that when referenced in lessons the strategies and notes are specifically tailored to the lesson. They also noted that if all of the language supports were implemented in a lesson, it would likely take much longer to complete. Language supports are explicitly referenced in the teacher's guide more frequently in the first half of the course than in the second, when authors anticipate that teachers have built more facility with identifying appropriate supports on their own.

During the 2018-19 school year, the high school IM materials were still under development. While we had access to beta materials, we were not able to speak with users in other districts. The committee took under consideration the experience of their OUSD middle school colleagues. Teachers named that they appreciate that there are Math Language Routines embedded into every lesson, and many of those routines are familiar to OUSD teachers. The teacher guide is easy to pick up and use. The curriculum is spiraled thoughtfully so students deepen their learning over time. Some challenges are centered around teaching units and lessons in the time recommended (a common challenge for any transition to a new curriculum), and IM is less task-based than our previous OUSD Core Curriculum. IM released their full high school program in summer 2019.

The Practice of Statistics

Of the finalist curricula, only CPM offers curriculum through AP Calculus. MVP and IM offer curriculum only through Algebra 2. Teachers of Math Analysis, AP Statistics, and AP Calculus reviewed the curriculum materials available from CPM and other materials currently in use by OUSD teachers, however Math Analysis and AP Calculus teachers decided that they did not have enough information or time with materials to determine a program to pilot for 2019-20. They requested more time to review materials next year. AP Statistics teachers unanimously decided that they would like to pilot the most up to date edition of our current AP Statistics textbook: *The Practice of Statistics*, 6th edition. Teachers named that their current book prepared students well for the AP exam, was highly recommended by Collegeboard for its alignment to the expectations of the AP exam, and the digital materials that came with the 6th edition would be a meaningful addition to their instruction.

2019-20 Curriculum Pilot

The pilot process, leading to a recommendation:

In August 2019, the Academics team recruited teachers to participate in a pilot of CPM and IM. Pilot teachers participated in the equivalent of a 1-day training for each curricula, and monthly sessions to collaboratively plan for their pilot unit, analyze student work, and share feedback on the curriculum materials. Below is a timeline of key events for 2019-20:

Date	Activity
Summer 2019	The Academics team coordinated with publishers to set up PD and materials for piloting teachers.
July 2019	High School Principal Engagement
August 2019	High School Math Memo: Curriculum Pilot for 2019-20 shared with all teachers Recruit teachers to pilot materials. 30 teachers across 9 schools signed up to pilot; 26 teachers were able to commit to the pilot agreements and participate in the pilot.
August 20, 21, and 24, 2019	CPM Curriculum Training
September 11, October 9, November 13, and December 11, 2019	Pilot Cohort met to collaborate around planning for the pilot unit, analyzing student work and assessments, and providing feedback on CPM. The December session included focus groups for Math Analysis and AP Calculus. No AP Calculus teachers attended; 2 Math Analysis teachers attended.
January 11, 2020	IM Curriculum Training
January 15, February 12, and March 11, 2020	Pilot Cohort met to collaborate around planning for the pilot unit, analyzing student work and assessments, and providing feedback on IM.
April 2020	Engage with each site math team to make materials available to preview and receive feedback. Community Engagement with families was cancelled due to COVID-19
April 15, 2020	Pilot cohort unanimously voted to recommend IM for adoption for Algebra 1, Geometry, and Algebra 2, and The Practice of Statistics 6th edition for AP Statistics.
April 30, 2020	Submit final recommendation paperwork to Board of Education
May 2020	Order curriculum materials

Teacher Evaluation of CPM

Upon review of artifacts from the curriculum pilot, the committee named the following strengths and opportunities of adopting CPM:

- CPM is spiraled, which leads to more opportunities to revisit prior learning and continue to deepen understanding over time.
- The assessment bank is a great resource to pull questions from
- The progression of conceptual topics is clear across lessons within a unit.
- There are group work structures that nurture production of academic language and collaboration.

- Problems are grounded in a context, which made it easy to refer to a concept based on the context students saw it in.
- The curriculum is artifact rich. There are many opportunities to display student thinking to guide discussion.
- There are helpful resources for students, such as Methods & Meaning- breaks down main topics and takeaways in a student friendly way.
- The teacher interface is easy to use, particularly when clicking between materials in English and Spanish.
- Units are grounded in a Big Idea & Essential Question, which were helpful to refer back to.
- There are a lot of resources for teachers to use included in the teacher notes (backpocket questions, etc).

The committee also named some weaknesses and risks:

- The spiraled nature of the curriculum makes it tough to keep track of your learning objective every day.
- It was difficult to manipulate or modify curriculum due to formatting
- It was difficult to build procedural fluency - very few but challenging problems; not a lot of similar structured problems
- Teachers would need ongoing professional learning in order to implement group work effectively.
- The problems were very text heavy. Teachers felt like they did not have enough strategies to support readers, and many modified the text for students.
- Teachers are concerned that middle school students are not familiar with the structure of CPM lessons or the group work structures.

Teacher Evaluation of IM

Upon review of artifacts from the curriculum pilot, the committee named the following strengths and opportunities of adopting IM:

- Teachers appreciated the daily lesson structure (warm ups, lesson summaries, cool downs, etc around daily learning goals).
- There are supports for structuring conversations with students.
- Many lessons included links to online applets that helped students visualize concepts.
- There is support for learning and using academic vocabulary.
- It is a problem-based curriculum.
- The materials are user-friendly for both students and teachers.
- There are built in spiraled review practice problems for every lesson.
- The lesson summaries were helpful to connect students and parents to main idea
- The pre-unit diagnostic assessments are specific to standards students need to be tapping into from previous years.
- There is the potential for alignment and coherence with middle school.
- We have two OUSD colleagues who are certified IM facilitators, which means that we can provide professional learning in-house, for free, using up to date IM training materials that are personalized for our Oakland context.

The committee also named some weaknesses and risks:

- Because the student workbooks are consumables, we will need to determine some protocols for managing workbooks.
- Some teachers have pacing concerns - some lessons went by really fast, some did not.
- We may need to supplement with additional practice problems or rich task experiences.

When comparing CPM and IM, the committee noted that:

- IM is more mathematically rigorous. There is more support for procedural fluency and there is

greater balance between procedural fluency, conceptual understanding, and application. CPM was heavy on conceptual understanding and application, but didn't offer as much support for procedural fluency.

- IM better supported students in engaging in and sustaining productive struggle. When using CPM materials, teachers needed to make a lot of modifications in order to get students to productively struggle. In CPM, a lot of the struggle was around understanding the context of the problem. By the time students got to the math, they were over the struggle and didn't have the perseverance to also struggle with the math.
- It was easier to see how unit big ideas developed across the IM units. Teachers preferred the daily lesson structure in IM.
- Teachers and students enjoyed the routines in IM, i.e. Notice and Wonder.
- Students found the materials in IM easier to process and use than CPM. Teachers and students appreciated the student workbooks that IM provides.

Community engagements were planned to occur in April in order to share instructional materials for families to preview and offer feedback. These were cancelled due to the COVID-19 crisis.

Teacher Evaluation of the Practice of Statistics

Upon review of artifacts from the curriculum pilot, the committee named the following strengths and opportunities of adopting The Practice of Statistics:

- The Practice of Statistics, 6th edition (TPS 6e) is one of the most popular AP Statistics textbooks used across the country. OUSD is already using The Practice of Statistics in its AP Statistics classes, but most teachers in our district still have the 3rd edition (TPS 3e) which is over 10 years old at this point. It is dated and missing important information reflective of the current AP Statistics exam.
- It is written by teachers who have been former graders for the AP Statistics exam. This is reflected in the content layout and design of the book, which is closely aligned to the AP exam and includes clear, up-to-date tips for students on providing model solutions for each topic. The newest edition includes the most current updates in AP exam scoring guidelines and provides insights for students into how the exam is scored and what they're expected to produce in terms of work.

The committee also named some weaknesses and risks:

- The Sapling online homework platform seems a little one-dimensional (mostly multiple choice questions). It may not be a value-add to pay the additional cost for access to this digital resource.
- There are many supplemental curriculum resources (e.g. www.statsmedic.com) that are already directly aligned to TPS 6e -- and recommended to use in conjunction with it. Several teachers in OUSD already use these resources. Will teachers or schools need to purchase access to these resources themselves?
- The textbook lacks sufficient relevant, up-to-date, engaging data sets. Teachers will need to find these online from other sources.

Evaluation of Materials for Math Analysis and AP Calculus

Due to low teachers participation, we are postponing the selection of materials for these two courses for next year. Math Analysis teachers also named that they would like to wait to see what curriculum would be selected for Algebra 2, to ensure a smooth transition between the two courses.

Final Recommendation

Ultimately, the committee agreed that the strengths of IM outweigh the weaknesses, and many of the weaknesses can be attended to through ongoing professional learning and collaboration. By adopting IM, our Oakland teachers will be able to build upon their pedagogical experience with using the OUSD Core Curriculum, so that implementation efforts at the site and district level can quickly move past aligning classroom experiences to a common vision and instead move into higher level professional development, such as engaging in deep content dives and implementing effective instructional routines that support access, equity, and cognitive demand. Students transitioning from OUSD middle schools into OUSD high schools will also have a coherent learning experience, as they will be learning from the same curriculum from grade 6 through Algebra 2.

It is the recommendation of the Math Instructional Materials Committee to proceed with the adoption and implementation of the Illustrative Mathematics (IM) curriculum in all Algebra 1, Geometry, and Algebra 2 classrooms, and the adoption and implementation of The Practice of Statistics, 6th edition in all AP Statistics classrooms.

We will continue to explore instructional materials for Math Analysis and AP Calculus in 2020-21.

Thank you for the consideration of our proposal.

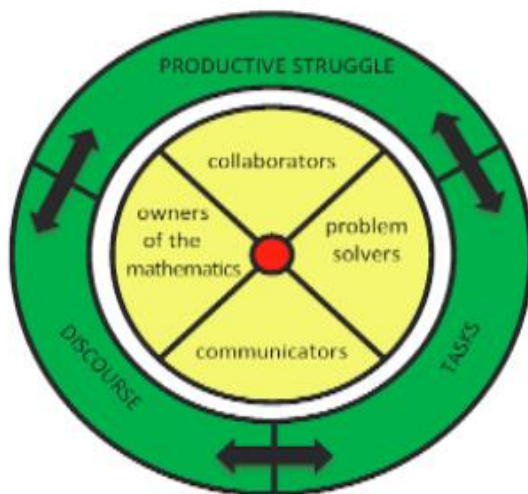
Submitted by the Mathematics Instructional Materials Review Committee

Eric Husted, Castlemont
William Matthews, Castlemont
Zachary Seldon, Castlemont
Angelique Alexander, Dewey
Kenneth Ingersoll, Dewey
David Garner, Life Academy
Elena Martyn, Life Academy
Kevin Liu, Life Academy
Joey Notaro, Fremont
Melissa Ramirez, Fremont
Soraya Torres, Fremont
Lawrence Teng, MetWest
Floresa Vaughn, McClymonds
Sage Moore, McClymonds
Tawana Guillaume, MPA
Keith Stoker, Oakland High
Keith Wong, Oakland High
Melody Jaros, Oakland High
Rio Fujita, Oakland High
Song Bae, Oakland High
Errico Bachicha, Oakland Tech
Johanna Langill, Oakland Tech

Kevin Ji, Oakland Tech
Michael Taylor, Oakland Tech
Randolph Li, Oakland Tech
Ryan Cox, Oakland Tech
Seth Zimmerman, Oakland Tech
Zubin Hu, Oakland Tech
Alex Paauwe, Skyline
Carlisa Johnson, Skyline
Fernando Mendez, Skyline
Josh Drilling, Skyline
Michael Oullette, Skyline
Robert Martinez, Skyline
Richelle Parra, Skyline
Shane Durkan, Skyline
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Steven Yan, Skyline
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Daniel Spinka, Linked Learning Office
Reina Cabezas, Linked Learning Office
Mary Reed, High School Math Specialist
Courtney Ortega, Secondary Math Coordinator

Appendices

OUSD VISION FOR MATHEMATICS



Through productive struggle, academic discourse, and performance tasks, OUSD students become problem solvers, collaborators, communicators and owners of the mathematics, to ensure college and career readiness.

Appendix B - Math Instructional Materials Review Committee: Attendance and Agendas

Attendance

	2019 Committee Meetings				2019-20 Committee Meetings							
Participant	3/12	3/19	4/9	4/16	9/11	10/9	11/13	12/11	1/15	2/12	3/11	4/15
Eric Husted					P	P	P	P	P		P	P
William Matthews	P	P		P								
Zachary Seldon	P	P	P	P	P	P	P	P	P	P	P	
Angelique Alexander					P		P					
Kenneth Ingersoll					P		P	P				
David Garner		P		P	P		P		P	P	P	P
Elena Martyn	P	P	P	P	P	P	P	P	P	P	P	
Kevin Liu					P	P	P	P	P	P	P	P
Joey Notaro	P	P	P	P	P	P	P	P	P	P	P	P
Melissa Ramirez	P	P	P	P								
Soraya Torres	P	P		P		P	P	P	P	P	P	P
Lawrence Teng	P	P	P	P								
Floresa Vaughn					P			P	P			P
Sage Moore					P	P	P			P	P	P
Tawana Guillaume		P	P	P								
Keith Stoker	P	P	P	P								
Keith Wong	P	P		P								
Melody Jaros	P	P	P	P								
Rio Fujita					P	P	P	P	P	P	P	P

Song Bae					P	P	P	P	P	P	P	P
Errico Bachicha	P	P	P	P								
Johanna Langill	P	P		P								
Kevin Ji	P	P	P	P	P	P	P		P	P	P	P
Michael Taylor					P	P	P	P	P	P	P	P
Randolph Li	P	P	P									
Ryan Cox					P	P	P		P	P	P	P
Seth Zimmerman	P	P	P	P								
Zubin Hu					P	P	P	P	P	P	P	P
Alex Paauwe					P	P	P	P	P	P	P	P
Carlisa Johnson	P	P	P	P		P		P	P	P	P	P
Fernando Mendez					P			P	P	P	P	P
Josh Drilling					P	P	P	P		P	P	P
Michael Oullette	P	P	P	P								
Robert Martinez					P	P	P	P	P			
Richelle Parra	P		P									
Shane Durkan	P	P	P	P	P		P	P	P		P	P
Sterling He					P	P	P	P	P	P	P	P
Steven Yan					P		P	P				
Washington Correa	P	P	P	P								
Xiaojie Zhang	P	P	P	P	P	P	P	P	P	P	P	P
Daniell Spinka	P											
Reina Cabezas	P	P	P	P								

**High School Math Instructional Materials Review Committee
Meeting #1 - March 12, 2019
Oakland Tech Room 204**

Committee Objective: Identify instructional materials that will best support OUSD students' learning of the standards

Meeting outcomes:

- Establish the group's ways of working together

- Build community as a team: understand who is in the room and the perspectives each member brings
- Study the Common Core State Standards
- Investigate the implications of a traditional vs integrated pathway

Time	Activity	Resources
4:30	Welcome & Framing	Slides
5:00	Building the team (community)	
5:20	Studying the Standards <ul style="list-style-type: none"> • Focus and coherence in high school • Major work of each course • Standards for Mathematical Practice 	http://www.corestandards.org/Math/
5:40	Studying the Progressions: Round 1 <ul style="list-style-type: none"> • Identify similarities and differences between the standard progression in a traditional vs integrated pathway 	CA Math Frameworks: <ul style="list-style-type: none"> • Math 8 • Algebra 1 • Geometry • Algebra 2 • Mathematics I • Mathematics II • Mathematics III • Pre-Calculus • Statistics and Probability • Calculus
6:10	Break	Resources to learn more about the Integrated Pathway: <ul style="list-style-type: none"> • CCSS Appendix A • CSBA Governance Brief (California School Board Association) • FAQs from Glendale Unified School District
6:20	Studying the Progressions: Round 2 <ul style="list-style-type: none"> • Surface implications for:students, supporting teachers, upper math courses, CTE courses 	
6:50	Gallery Walk & Discussion	
7:20	Appreciations and Close	

**HS Math Instructional Materials Review Committee
Meeting #2 - March 19, 2019
Oakland Tech Room 204**

Committee Objective: Identify instructional materials that will best support OUSD students' learning of the standards

Meeting outcomes:

- Determine a working tool for evaluating curriculum programs.
- Explore three curriculum programs: Open Up/IM, Mathematics Vision Project, and Big Ideas Math.

Time	Activity	Resources	
4:30	Welcome	Slides	
4:50	What do we look for in instructional materials?	Generic Evaluation Tool - Local Review Criteria	
5:00	Overview of Open Up	<ul style="list-style-type: none"> • Unit structure • Course guide/ scope & sequence • Lesson structure • Common routines • Assessment 	
5:10	Overview of MVP		EdReport for Open Up Middle School (HS report not available yet)
5:20	Overview of Big Ideas		EdReport for MVP
5:30	Break		
5:40	Exploration	EdReport for Big Ideas - Integrated EdReport for Big Ideas - Traditional	
5:30	Break		
5:40	Exploration	Generic Evaluation Tool - Local Review Criteria	
6:50	Discussion <ul style="list-style-type: none"> • Share initial reflections • Offer questions for further exploration 		
7:20	Appreciations and Close		

**High School Math Instructional Materials Review Committee
Meeting #3 - April 9, 2019
Oakland Tech Room 204**

Committee Objective: Identify instructional materials that will best support OUSD students' learning of the standards

Meeting outcomes:

- Study criterion for evaluating curriculum alignment to rigor, as defined by the Common Core shifts.
- Explore an additional curriculum program: CPM.
- Narrow our list to 2-3 curricula that we would like to continue to consider.

Time	Activity	Resources
4:30 20 min	<p>Welcome</p> <ul style="list-style-type: none"> • Go over outcomes • Community agreements • Committee agreements <p>Opener</p> <ul style="list-style-type: none"> • Share with a partner a picture that exemplifies your Spring Break. <p>Parking Lot - answer any questions we can from last session</p>	Slides
4:50 30 min	<p>Grounding Ourselves in the 3 Common Core Shifts</p> <ul style="list-style-type: none"> • Focus • Coherence • Rigor 	
5:20 10 min	<p>Overview of CPM</p> <ul style="list-style-type: none"> • Unit structure • Course guide/ scope & sequence • Lesson structure • Common routines • Assessment 	EdReports for CPM traditional EdReports for CPM Integrated
5:30 10 min	Break	
5:40 70 min	<p>Exploration</p> <ul style="list-style-type: none"> • CPM • Big Ideas • IM • MVP 	Generic Evaluation Tool - Local Review Criteria
6:50 30 min	<p>Discussion</p> <ul style="list-style-type: none"> • Report out findings <ul style="list-style-type: none"> ○ Share reflections ○ Offer questions for further exploration <p>Looking Ahead Next week we will determine which programs to pilot and start to think about a process for piloting 2-3 programs.</p> <p>Vote: Rate your top 3 curriculum programs that we have seen and would like to continue to consider.</p>	<p>Notes</p> <p>IM MVP Big Ideas CPM</p>

7:20 10 min	<p>Agreements</p> <ul style="list-style-type: none"> ● Around confidentiality of process ● Around showing up, doing in-between work if needed ● Around what we can say about where we landed tonight and where we will pick it up next week <p>Appreciations and Close</p>	
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**High School Math Instructional Materials Review Committee
Meeting #4 - April 16, 2019
Oakland Tech Room 204**

Committee Objective: Identify instructional materials that will best support OUSD students' learning of the standards

Meeting outcomes:

- Explore the CA Math Frameworks for our course options beyond Algebra 2, and determine next steps for those courses.
- Narrow our list to 1-2 curricula that we would like to pilot.
- Brainstorm recommendations for a pilot process.

Time	Activity	Resources		
4:30 20 min	<p>Welcome</p> <ul style="list-style-type: none"> Go over outcomes Community agreements Committee agreements <p>Opener</p> <p>Parking Lot - answer any questions we can from last session</p>	Slides		
4:50 10 min	<p>Teacher Share Out</p> <p>Hear from teachers who tried materials from IM, CPM, and/or MVP</p>			
5:00 55 min	<p>Algebra 1 - AP Calculus and AP Statistics</p> <ul style="list-style-type: none"> Share board sequence. Break out sessions: <table border="1" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Beyond Algebra 2</p> <ul style="list-style-type: none"> Explore CA Frameworks Exploration of Instructional Materials Create Poster Next Steps </td> <td style="width: 50%; vertical-align: top;"> <p>Alg, Geo, Alg2</p> <ul style="list-style-type: none"> Continue to explore selected curriculum through: <ul style="list-style-type: none"> Scavenger Hunt Plan a Lesson Unpack a Unit Create Poster </td> </tr> </table>	<p>Beyond Algebra 2</p> <ul style="list-style-type: none"> Explore CA Frameworks Exploration of Instructional Materials Create Poster Next Steps 	<p>Alg, Geo, Alg2</p> <ul style="list-style-type: none"> Continue to explore selected curriculum through: <ul style="list-style-type: none"> Scavenger Hunt Plan a Lesson Unpack a Unit Create Poster 	<p>CA Math Framework</p> <ul style="list-style-type: none"> Pre-Calculus Statistics and Probability Calculus <p>The Basic Practice of Statistics (old 5th edition pdf)</p>
<p>Beyond Algebra 2</p> <ul style="list-style-type: none"> Explore CA Frameworks Exploration of Instructional Materials Create Poster Next Steps 	<p>Alg, Geo, Alg2</p> <ul style="list-style-type: none"> Continue to explore selected curriculum through: <ul style="list-style-type: none"> Scavenger Hunt Plan a Lesson Unpack a Unit Create Poster 			
5:55 10 min	<p>Break</p>			
6:05 25 min	<p>Gallery Walk of Small Group Posters</p> <ul style="list-style-type: none"> What do you notice? What do you wonder? What are the implications for our pilot process? <p>Discussion</p> <ul style="list-style-type: none"> Vote on 1-2 curricula to pilot 			
6:30 20 min	<p>Brainstorm Recommendations for a Piloting Process</p>			
6:50 20 min	<p>Get Clear on our Decisions as a 2019 MIMRC and our Next Steps</p>			
7:10 10 min	<p>Agreements</p> <ul style="list-style-type: none"> Around confidentiality of process Around showing up, doing in-between work if needed Around what we can say about where we landed tonight and where we will pick it up next week 			

	Appreciations and Close	
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High School TeamMath Collaborative

Curriculum Pilot | September 11, 2019

Outcomes:

- Reflect on the pilot unit so far.
- Dive into the standards for the pilot unit. Note differences between the pilot unit and the OUSD Core Curriculum unit(s) for the purpose of planning.
- Collaborate on unit and/or lesson planning.

2:00 - 4:00; Tech comes by 3:00

Time	Activity	Materials
2:00- 2:15	Welcome & Opener	Slides Course Team Folders
2:15	Standards Dive Jigsaw standards in CPM unit and discuss as a course team	OUSD Core Curriculum & IAB CPM & IAB CA Frameworks AP Statistics Course and Description
2:40	Backwards Planning from Chapter Assessments	
3:00	Standards Dive (cont.) Attend to standards that are missing from CPM but included in Core Curriculum	
3:15	Unit and Lesson Planning	
3:45	Closing & Appreciations <ul style="list-style-type: none"> ● Math Journal: <ul style="list-style-type: none"> ○ What are the big ideas of this unit? What key language, representations, and/or strategies will students need to engage with? ○ What is essential that students know and are able to do before moving onto the next unit? 	Feedback form
4:00	Close	

High School TeamMath Collaborative

Curriculum Pilot | October 09, 2019

Outcomes:

- Reflect on the pilot unit so far
- Collaboratively plan an upcoming lesson from CPM Ch. 2.
- Analyze assessment data from Ch. 2 to inform next instructional steps.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15 - 2:30	Welcome & Opener	Slides
2:30	Geometry & Algebra 2: Lesson Planning Outcome: Upload a lesson plan into your course team folder	Lesson Planning taskcard Lesson Planning Graphic Organizer Course Team Folders
	Algebra 1: Assessment Analysis Outcome: Complete your row on the Assessment Analysis spreadsheet	Looking at Student Work taskcard Assessment Analysis Spreadsheet
3:40	Sharing Next Steps	
4:00	Closing & Appreciations	Feedback Form
4:15	Close	

High School TeamMath Collaborative Curriculum Pilot | November 13, 2019

Outcomes:

- Reflect on the pilot unit so far
- Collaboratively plan an upcoming lesson from CPM Ch. 2.
- Analyze assessment data from Ch. 2 to inform next instructional steps.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15	Welcome & Opener Math Journal: <ul style="list-style-type: none">• Reflect on your last month of instruction. What have you tried from CPM? What has gone well? What questions do you have?	Slides
2:30	Geometry and Algebra 2: Analyze Student Work (from the lesson you planned last month)	Taskcard
	Algebra 1: Ch. 2 Assessment Analysis	Taskcard Spreadsheet
3:40	Final Exams Considerations	
4:00	Closing & Appreciations	Feedback form
4:15	Close	

High School TeamMath Collaborative

Curriculum Pilot | December 11, 2019

Outcomes:

- Reflect on the pilot unit so far
- Reflect on next steps from assessment analysis and plan for re-engagement
- Analyze assessment data from Ch. 2 to inform next instructional steps.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15	Welcome & Opener	Slides
2:30	Algebra 1: Reflection on Next Steps from Assessment Analysis & Plan for Re-Engagement	Re-Engagement packet Spreadsheet
	Geometry & Algebra 2: Ch. 2 Assessment Analysis	Taskcard Geometry spreadsheet Algebra 2 spreadsheet
3:15	Overall CPM Feedback	Evaluation Tool
3:30	6-12 Circle	Feedback form
3:45	December Feedback Final Exam Considerations Focus Groups for Math Analysis and Prob/Stats	
4:15	Close	

High School TeamMath Collaborative

Curriculum Pilot | January 15, 2020

Outcomes:

- Reflect on the pilot unit so far.
- Dive into the standards for the pilot unit. Note differences between the pilot unit and the OUSD Core Curriculum unit(s) for the purpose of planning.

- Collaborate on unit and/or lesson planning.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15	Welcome & Opener	Slides
2:30	2nd Semester Planning <ul style="list-style-type: none"> • Adjust second semester scope & sequence to account for board proposal timeline 	Yearlong Calendar template Core Curriculum Scope & Sequences IM Blog Post: Planning Lessons for a Block Schedule
3:00	Unit and Lesson Planning <ul style="list-style-type: none"> • Study focal lessons within each unit to understand the unit storyline and how mathematical understanding progresses across a unit <ul style="list-style-type: none"> ○ Alg 1 Unit 6: Lessons 7 and 11 ○ Alg 1 Unit 7: Lessons 6, 7, 8, 9, 10 ○ Geo Unit 4: Lessons 4 and 6 ○ Alg 2 Unit 2: Lessons 13 and 15 ○ Alg 2 Unit 3: Lessons 7 and 11 	Unit Planning Protocol Illustrative Math Lesson Planning Template Sample Weekly Planning Calendar
3:45	Closing & Appreciations <ul style="list-style-type: none"> • Math Journal: <ul style="list-style-type: none"> ○ What are the big ideas of this unit? What key language, representations, and/or strategies will students need to engage with? ○ What is essential that students know and are able to do before moving onto the next unit? 	Feedback form
4:15	Close	

High School TeamMath Collaborative

Curriculum Pilot | February 12, 2020

Outcomes:

- Plan an upcoming lesson.
- Study a lesson series to understand the unit storyline and how mathematical understanding progresses across a unit.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15	Welcome & Opener	Slides
3:00	Unit and Lesson Planning With a course team partner or trio, jigsaw lessons within your focal lesson series. <i>Outcome: Completed lesson plan</i>	Illustrative Math Lesson Planning Template IM Blog Post: Planning Lessons for a Block Schedule
2:30	Building the Lesson Series Storyline Groups share the summary of the lesson, what students will know and be able to by the end of the lesson and the instructional decisions that your group came up with for implementing this lesson <i>Outcome: Understand how the lesson series develops</i>	
3:45	Closing & Appreciations <ul style="list-style-type: none"> • Math Journal: <ul style="list-style-type: none"> ○ Write the storyline for the lesson series that you planned. 	Feedback form
4:15	Close	

High School TeamMath Collaborative

Curriculum Pilot | March 11, 2020

Outcomes:

- Plan an upcoming lesson, or backwards plan from an end of unit assessment.
- Study a lesson series to understand the unit storyline and how mathematical understanding progresses across a unit.

2:15 - 4:15; Tech comes by 3:00

Time	Activity	Materials
2:15	Welcome & Opener	Slides
2:30	Options: <ol style="list-style-type: none"> 1) Lesson Planning 2) Backwards Plan from the Unit Assessment 3) AP Statistics: Instructional Materials Review 	Illustrative Math Lesson Planning Template IM Blog Post: Planning Lessons for a Block Schedule
3:30	Building the Lesson Series Storyline	
3:50	Closing & Appreciations <ul style="list-style-type: none"> • Math Journal: <ul style="list-style-type: none"> ○ Write the storyline for the lesson series that you planned. • Announcements • Feedback form 	Feedback Form
4:15	Close	

High School TeamMath Collaborative

Curriculum Pilot | April 15, 2020

Outcomes:

- Reflect on the IM curriculum
- Compare CPM and IM in order to vote
- Vote on a curriculum to recommend to the Board for adoption for the 2020-21 school year.

2:15 - 3:15

Time	Activity	Materials
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2:15	Welcome & Opener	
2:20	Overall IM Feedback <ul style="list-style-type: none"> • Discussion in break out rooms by course • Whole group share out 	evaluation tool Evaluation Tool Folder IM Discussion notes
2:45	CPM vs IM <ul style="list-style-type: none"> • Whole group discussion 	CPM Discussion notes CPM vs IM notetaker
3:00	The Vote <ul style="list-style-type: none"> → Every person gets one vote → The voting decision will require a 70% majority 	Click here to vote!
3:10	Next Steps & Appreciations Announcements: <ul style="list-style-type: none"> • Secondary Math Google Classroom: jpc4per • Optional Zoom Course Team check-ins (District-wide) <ul style="list-style-type: none"> ○ April 21, 2:30-3:30pm ○ May 5, 2:30-3:30pm ○ May 19, 2:30-3:30pm 	
3:15	Close	

Appendix C - Local Review Criteria

Local Criteria based on teacher community input

These criteria were identified based on feedback from the OUSD math teaching community about the aspects of instructional materials that were most important to them when considering an adoption that will meet the needs of Oakland's diverse students and support teachers in their efforts to plan engaging lessons that facilitate student learning. We also acknowledge that no single curriculum will be able to meet all criteria, and that ongoing collaboration and teacher input will be necessary to our work.

Category	Criteria	Notes/ Rating
Common Core Aligned Rigorous Tasks	<ol style="list-style-type: none"> 1. Align to content standards 2. Intentionally incorporate Standards for Mathematical Practice 3. Balance conceptual understanding and application 	

	<ol style="list-style-type: none"> 4. Support procedural fluency¹ 5. Structure of problems and tasks provides opportunities for students' productive struggle 	
Lesson and Unit Design	<ol style="list-style-type: none"> 1. Units are organized around big, important mathematical ideas or questions, and build to a summative assessment. 2. Lessons have specific objectives or targets. 3. Explanation and justification are embedded in problems and tasks. 4. Materials include opportunities for students to investigate and generalize to build math understanding. 5. Lessons explicitly support academic discourse. 6. Units integrate formative assessment opportunities. 	
Differentiation (Universal Access)	<ol style="list-style-type: none"> 1. Materials encourage teachers to draw on multiple resources such as objects, drawings, and graphs to facilitate learning. 2. Materials integrate explicit language supports for English learners to support regular and active participation in learning mathematics. 3. Materials support small group and individualized/personalized learning opportunities. 4. Materials provide guidance for supporting students with special needs 	

Continued on next page

¹ Procedural fluency scored lower in priority than conceptual understanding and application; this may be the easiest aspect of rigor to supplement, should that be required.

Continued from previous page

Category	Criteria (continued)	Notes/Rating
Usability	<ol style="list-style-type: none">1. Materials include clear and helpful explanations of standards and progressions, including connections to prior and future coursework.2. Materials include clear and helpful explanations of math content.3. Materials include clear and helpful explanations of common student responses or misconceptions.	
Additional Considerations	<ol style="list-style-type: none">1. Materials are visually well-organized and inviting to students.2. Materials integrate opportunities to use technology to enhance mathematics learning3. Materials include strong assessment components.	

Appendix D - Community Events and Attendance

Date	Community Event	Attendance
July 29, 2019	High School Principal Engagement to receive feedback on the curriculum pilot proposal for the year.	Lucia Moritz, Gary Middleton, Vanessa Sifuentes, Moyra Contreras, Dwayne Bartholomew, Michael Scott, Amy Carozza, William Riley, Darrell Ross, Rosemary Rivera, Tom Skjervheim, Aryn Bowman, Alykhan Boolani, Lucinda Taylor, Jeffrey Taylor, Michelle Deiro, Matin Abdel-qawi, Veronica Garcia, Staci Ross-Morrison, Willie Thompson, Nicole Pierce, Bianca D'Allesandro, Bukola Lawal, Emma Batten-Bowman
April 28, 2020	Preview IM curriculum materials, ask questions, and provide feedback.	Joey Notaro, Alyssa Santiago, Barbara David, Brittney Curry, Christian Huerta, Keith Wong, Liz Haemmel, Lorraine Savatton, Michael Taylor, Mien Lu, Reyna Guerra, Rio Fujita, Sandy Tu, Staci Ross-Morrison, Sterling He, Tina Garcia, Zachary Seldon, Soraya Torres
April 20, 2020	Engage with leaders at Coliseum College Prep Academy to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Amy Boyle, Amy Carozza
April 22, 2020	Engage with leaders at Castlemont High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Eric Husted, William Matthews, Zachary Seldon
April 22, 2020	Engage with leaders at Fremont High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Joey Notaro, Tom Skjervheim
April 23, 2020	Engage with leaders at Oakland Technical High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Kevin Ji, Johanna Langill, Staci Ross-Morrison
April 23, 2020	Engage with leaders at Skyline High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Shane Durkan, Sterling He, Carlisa Johnson
April 24, 2020	Engage with leaders at MetWest High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Logan Manning, Lawrence Teng
April 28, 2020	Engage with leaders at McClymonds High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Jerome Gourdine, Jeffrey Taylor, Floresa Vaughn
April 28, 2020	Engage with leaders at Madison Park Academy to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Jessica Tucker
April 29, 2020	Engage with leaders at Oakland High School to make materials available to preview and receive feedback to inform spring and summer professional learning opportunities.	Matin Abdel-qawi, Rio Fujita, Shoshana Towers, Keith Wong
April 30, 2020	Preview IM curriculum materials, ask questions, and provide feedback.	Alessandra Cabrera, Alyse Schneider, Amy Boyle, Corvetta Kirtman, Lizzie Humphries, Elizabeth Dutton, Floresa Vaughn, Gustavo Ontiveros, Jessica

		<p>Wan, Johanna Langill, Joey Notaro, Lawrence Teng, Matthew Clark, Nicholas Rey, Patricia McNeary-Calloway, Sandra Ratto, Seth Zimmerman, Sharif Patterson, Steven Yan, Tina Garcia, William Matthews, Alex Paauwe, Anthony Mbara, Fernando Mendez, Javier Mesa, Melissa Ramirez, Renee Bullie, Steven Holbert-O'Carroll</p>
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**Community events with families had to be cancelled due to the COVID-19 shelter-in-place.

Appendix E - Curriculum Pilot: Communication and Participation

MEMORANDUM

TITLE: High School Math: Curriculum Pilot for 2019-20
ISSUERS: Wesley Jacques, Executive Director, Academics and Instructional Innovation
Brenda Tuohy, Director, TK-12 STEM
Courtney Ortega, Secondary Math Coordinator

ROUTING: Teachers, Principals
DATE: Updated on August 9, 2019
PURPOSE: To inform teachers and school leaders of high school curriculum updates for 2019-20

Background

Following a rigorous review process in Spring 2019, your Math Instructional Materials Review Committee has voted to:

- Pilot two curricula for Algebra, Geometry, Algebra 2
 - [Core Connections](#), published by College Preparatory Mathematics (CPM)
 - [Illustrative Mathematics](#) (IM), published by Kendall Hunt
 - The IM pilot will include a review of curriculum materials for Algebra 1 Support
- Pilot one curriculum for AP Statistics
 - *The Practice of Statistics, 6th edition*
- Continue to review materials for Math Analysis, Probability & Statistics, and AP Calculus

The committee consisted of 25 teachers, math coaches, and CTE coaches. After interviewing 18 school districts in CA, your committee examined 5 curriculum programs. They used a set of criteria (Common Core Aligned Rigorous Tasks, Lesson & Unit Design, Differentiation, and Usability) that was identified through a survey that was shared with every high school math team, and completed by 13 teachers and 4 administrators.

Curriculum Pilot Process

Please complete this [google form](#) by Wednesday, August 14 to express an interest in participating. Please share widely with your math team, as I am still updating my contact list for the new school year. We strongly encourage each site to have at least one person participate in the pilot process. Ideally, all teachers teaching the same course at a particular site would participate in the pilot, and every piloting teacher would have a colleague at the same site who is also piloting, even if at a different course.

Teachers who are piloting Algebra, Geometry, and Algebra 2 will receive a stipend for **\$1,000** in compensation for a total of 12 hours of curriculum training plus approximately 14 hours for some extended contract time on 2nd Wednesdays and extra time required for planning and providing feedback.

Teachers who are reviewing curriculum materials for Algebra 1 Support, Math Analysis, Probability & Statistics, AP Statistics, and AP Calculus will receive a stipend for **\$500** in compensation for approximately 13 hours of some extended contract time on 2nd Wednesdays and extra time required for planning and providing feedback. Teachers reviewing curriculum materials will not be required to submit the same quantity of feedback as the piloting teachers.

For Algebra, Geometry, and Algebra 2:

Participating teachers must commit to piloting the identified unit from **both** curricula (aligned to the OUSD Core Curriculum scope & sequence), participating in training sessions, and sharing feedback on their experience with each program both in writing (surveys) and in a structured collaborative space.

Algebra		
Time	Pilot Unit	Alignment with OUSD Core Curriculum
September/October <i>(after Unit 1)</i>	CPM Ch. 2 Linear Relationships	Replaces Core Curriculum Units 2 and 3. Make sense of what you still need to teach from Core Curriculum Units 2 and 3 afterwards.
Feb/Mar/Apr <i>(after Unit 5)</i>	IM Unit 6 Intro to Quadratic Functions and Unit 7 Quadratic Equations	Replace both Core Curriculum Units 6 and 7.
Geometry		
Time	Pilot Unit	Alignment with OUSD Core Curriculum
October <i>(after Units 1 and 2)</i>	CPM Ch. 2 Angles and Measurement	Replaces Core Curriculum Unit 3. Make sense of what you still need to teach from Core Curriculum Unit 3 afterwards.
Feb/Mar <i>(after Unit 5)</i>	IM Unit 4 Right Triangle Trigonometry	Replaces Core Curriculum Unit 6. Make sense of what you still need to teach from Core Curriculum Unit 6 afterwards.
Algebra 2		
Time	Pilot Unit	Alignment with OUSD Core Curriculum
October <i>(after Units 1 and 2)</i>	CPM Ch. 2 Transformations of Parent Graphs	Replaces Core Curriculum Unit 3. Make sense of what you still need to teach from Core Curriculum Unit 3 afterwards.
Feb/Mar/Apr <i>(after Unit 5)</i>	IM Unit 2 Polynomials and Unit 3 Complex Numbers and Rational Exponents	Replaces Core Curriculum Unit 7. Teach Core Curriculum Unit 6 after the pilot unit.

Participating teachers will commit to trying to use each replacement unit as intended by the authors. Student needs will come first, so small adjustments may be needed to meet those needs. As piloting teachers, however, please commit to using the materials as designed as much as possible, so that we can evaluate the effectiveness of the curriculum programs.

Curriculum Pilot Process & Timeline

*all sessions will be held at Dewey Academy, Rooms 204 & 205

		Algebra, Geometry, Algebra 2	Algebra 1 Support, Math Analysis, Prob/Stats, AP Stats, AP Calculus
		Pilot Curriculum Program #1: Core Connections (CPM)	
Aug to Dec 2019	Saturday, August 24, 9:00-3:30pm OR Tue, Aug 20 & Wed, Aug 21 4:00-7:00pm	Curriculum training for CPM	n/a
	2nd Wednesday September 11 2:00-4:00pm	Reflect on the pilot unit so far Collaborate on planning the rest of the unit	Course team collaboration to unpack standards, analyze formative assessments, and plan upcoming lessons/units.
	2nd Wednesday October 9 2:00-4:00pm	Reflect on the pilot unit so far Collaborate on planning the rest of the unit	Course team collaboration to unpack standards, analyze formative assessments, and plan upcoming lessons/units.
	2nd Wednesday November 13 2:00-4:00pm	Reflect on the pilot unit so far Analyze unit assessments and other data	Course team collaboration to unpack standards, analyze formative assessments, and plan upcoming lessons/units.
	2nd Wednesday December 11 2:00-4:00pm	Gather pilot unit feedback	Gather feedback on curriculum materials.
			Pilot Curriculum Program #2: Illustrative Mathematics (IM)
Jan to Apr 2020	Saturday, January 11 9:00-3:30pm	Curriculum training for IM	n/a
	2nd Wednesday January 15 2:00-4:00pm	Prepare to teach the pilot unit(s)	Course team collaboration to unpack standards, analyze formative assessments, and plan upcoming lessons/units.
	2nd Wednesday February 12 2:00-4:00pm	Reflect on the pilot unit(s) so far Collaborate on planning the rest of the unit(s)	Course team collaboration to unpack standards, analyze formative assessments, and plan upcoming lessons/units.

	2nd Wednesday March 11 2:00-4:00pm	Gather feedback on the pilot unit(s) Analyze unit assessments and other data	Gather feedback on curriculum materials.
	2nd Wednesday April 15 2:00-4:00pm	Provide feedback on board proposal.	Provide feedback on board proposal.
Mar 2020	Community Events		
Apr 2020	Adoption proposal considered by Board of Education		
May 2020	<i>Pending adoption by board:</i> Purchase contract considered by Board of Trustees. Presentations to each school site to share selected curriculum.		

ASSISTANCE:

For more information, please contact:

- Courtney Ortega, Secondary Math Coordinator
courtney.ortega@ousd.org

Pilot Participation

Name	School	2nd Wed Course Team	Additional Courses for Review
Manisha Gangopadhyay	Bunche	Algebra 1	Geometry
Eric Husted	Castlemont	Algebra 1	
Zachary Seldon	Castlemont	Geometry	
Angelique Alexander	Dewey	Algebra 1	Geometry
Kenneth Ingersoll	Dewey	Geometry	
Soraya Torres	Fremont	Geometry	Prob/Stats
Joey Notaro	Fremont	Algebra 2	Math Analysis
David Gardner	Life	Algebra 1	Geometry
Kevin Liu	Life	Algebra 1	Algebra 2
Elena Martyn	Life	Algebra 2	Math Analysis
Floresa Vaughn	McClymonds	Geometry	Math Analysis
Sage Moore	McClymonds	AP Statistics	
Song Bae	OHigh	Algebra 2	Algebra Support
Rio Fujita	OHigh	Algebra 2	Algebra Support
Justin Hobaugh	OHigh	Math Analysis	Algebra Support
Carlisa Johnson	Skyline	Algebra 1	AP Statistics
Robert Martinez	Skyline	Algebra 1	
Shane Durkan	Skyline	Algebra 1	AP Statistics
Alex Paauwe	Skyline	Algebra 1	Geometry
Sterling He	Skyline	Algebra 2	
Fernando Mendez	Skyline	Algebra 2	
Josh Drilling	Skyline	Geometry	Algebra 1
Steven Yan	Skyline	Geometry	
Xiaojie Zhang	Skyline	Algebra 2	Math Analysis, AP Calculus
Michael Taylor	Tech	Geometry	Prob/Stats
Ryan Cox	Tech	Algebra 2	Geometry
Zubin Hu	Tech	Algebra 2	Geometry
Kevin Ji	Tech	AP Statistics	Geometry

Appendix F - Curriculum Pilot: Professional Learning Attendance and Agendas

Name	CPM Training: Tue	CPM Training: Wed	CPM Training: Sat	IM Training: 1/11
Eric Husted	Present	Present	Present	Yes
Zachary Seldon	Present	Present		Yes
Soraya Torres	excused - make up with Mary			Yes
Joey Notaro	Present	excused - make up with Mary		Yes
David Gardner	excused - make up with Mary	Present		Yes
Elena Martyn	Present	Present		make up with site
Kevin Liu			Present	Yes
Floresa Vaughn	Present	Present		Yes
Sage Moore	n/a			n/a
Song Bae			Present	Yes
Rio Fujita			Present	Yes
Carlisa Johnson	Present	Present		Yes (pm - Trellis)
Alex Paauwe			Present	Yes
Shane Durkan			Present	Yes
Josh Drilling			Present	Yes
Fernando Mendez	Present	Present		Yes
Sterling He			Present	Yes
Xiaojie Zhang	Present	Present		Yes
Michael Taylor	Present	Present		Yes
Ryan Cox	Present	Present		Yes
Zubin Hu	Present	Present		Yes (pm - Trellis)
Kevin Ji	n/a			n/a
Manisha Gangopadhyay			Present	
Angelique Alexander			Present	
Kenneth Ingersoll			Present	
Justin Hobough	n/a			
Steven Yan	excused - make up with Mary			
Robert Martinez			Present	Yes
David Breitenbuecher			Present	
Wendy Lichtman	Present			
Derek Boyd			Present	
Lawrence Teng	Present	Present		

CPM Training Agenda

Oakland Unified School District
August 2, 2109
Pilot Agenda (draft)

Opening problem from CCA2: Building with yarn

First Pillar of CPM, Collaboration: Getting into teams

Review the Mathematical Practices

CCA – Function Activity

CPM philosophy and course design

CCG – Carpet Mat

Ebook Tour

Lunch

Assessment philosophy and website

Planning your pilot – using task cards to review course pilot problems

Reflections and next steps

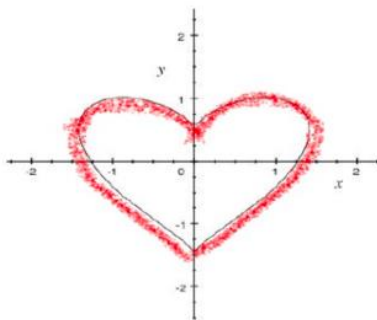
January 11, 2020

Slides

Time	Activity
9:00	<p>Welcome</p> <ul style="list-style-type: none"> ● Facilitator intro ● What does it look like doing math? (opp to do quick name/school intros) ● Norms/community agreements ● Agenda overview
9:15	<p>Problem Based Structure</p> <ul style="list-style-type: none"> ● Learning Goals for Section 1 ● Overarching design & Structure of a Lesson ● Look at Alg1 Unit 6 Unit 5 (update slides 12-24) ● The Structure of a Lesson (Reading Handout) ● Math Journal → share out
10:15	<ul style="list-style-type: none"> ● Let's explore materials <ul style="list-style-type: none"> ○ Slides 33-39: let teachers know that these are resources available. If you want to learn more, you can check out these slides later and also go to the im.kendallhunt.com website to learn more ○ Look for materials with a partner (looking at a specific lesson from your course)
10:45	<p>BREAK</p> <ul style="list-style-type: none"> ● Create your IM account if you have not done so yet
10:55	<p>Assessment</p> <ul style="list-style-type: none"> ● Learning goals ● Purpose of Assessment ● Big Idea of Units ● Assessment sort <ul style="list-style-type: none"> ○ Unit Narratives ○ Algebra 1 Unit 6 Assessment Sort ○ Geometry Unit 4 Assessment Sort ○ Algebra 2 Unit 2 Assessment Sort ● Quickly revisit the kinds of assessment ● If time allows, have teachers jigsaw the 5 kinds of formative assessment ● Math Journal → turn and talk
12:00	<p>LUNCH</p>
12:30	<p>Energizer: Sync Claps</p>
12:40	<p>Instructional Routines in IM: Math Content Routines & Math Language Routines</p> <ul style="list-style-type: none"> ● Why instructional routines? - Stronger and Clearer (20 min) - KMW ● Review quickly math content routines (20 min) <ul style="list-style-type: none"> ○ Do a Math Talk - KMW

1:30	<ul style="list-style-type: none"> ● Language demands + MLRs ● Info Gap (20 min) - KMW <ul style="list-style-type: none"> ○ Problem 2 cards ● Rehearsals (15 min planning + 15 min rehearsals)
2:45	<p>Getting Ready for Pilot Unit</p> <ul style="list-style-type: none"> ● Scavenger hunt to find unit materials
3:20	Appreciations
3:30	Close

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**Attachment B:
High School Math
Budget Proposal for
Instructional Materials**

Oakland Unified School District

May 2020

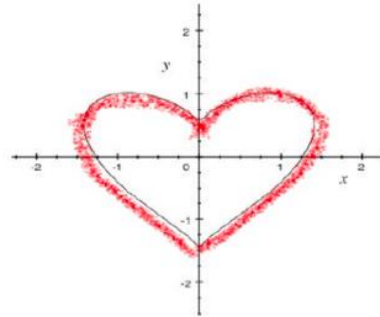
Budget Proposal for 2020-21

IM (Algebra 1, Geometry, Algebra 2)			
Instructional Material	Quantity	Price per unit	Total Cost
Student Workbooks	8,370	\$22.99/workbook *Algebra 1 Support \$18.99	\$190,686.30
Teacher Guides	105	\$67.99/book *Algebra 1 Support \$44.99	\$8,033.70
Classroom Kits			
Algebra 1	35	\$130.96/kit	\$4,583.60
Geometry	35	\$333.84/kit	\$11,684.40
Algebra 2	25	\$173.86/kit	\$4,346.50
Shipping			\$17,546.76
Tax			\$21,911.55
SUB TOTAL			\$258,792.81
The Practice of Statistics (AP Statistics)			
Instructional Material	Quantity	Price per unit	Total Cost
Student Textbooks & Digital Materials	275	\$195.89/student	\$53,869.75
Teacher Guides & Digital Materials (included with student materials)	10	\$0	\$0
Shipping & Processing Fees			\$1,077.40
SUB TOTAL			\$54,947.15
TOTAL			\$313,739.96

Budget Proposal for Recurring Annual Expenses, starting in 2021-22

IM (Algebra 1, Geometry, Algebra 2)				
Instructional Material	Rationale	Quantity	Price per unit	Total Cost
Student Workbooks	We will need to replenish any Student Workbooks used as a consumable. We anticipate that the majority of our teachers will make use of the digital resources and/or the editable word documents that IM provides for every lesson. Therefore, we anticipate that many schools will not reorder Student Workbooks each year.	3,000	\$22.99/workbook	\$68,970
Teacher Guides	We anticipate new-hires each school year, as well as teachers transitioning to new course assignments.	10	\$67.99/book	\$679.90
Classroom Kits				
Algebra 1	We anticipate some schools adding new sections over time.	2	\$130.96/kit	\$261.92
Geometry		2	\$333.84/kit	\$667.68
Algebra 2		2	\$173.86/kit	\$327.72
SUB TOTAL				\$70,907.22
The Practice of Statistics (AP Statistics)				
Instructional Material	Rationale	Quantity	Price per unit	Total Cost
Student Textbooks & Digital Materials	Schools will be responsible for replacing any lost or damaged materials. We anticipate schools expanding their programs by about 5% in some years.	14	\$195.89/student	\$2,742.46
Teacher Guides & Digital Materials (included with student materials)		1	\$0	\$0
SUB TOTAL				\$2,742.46
TOTAL				\$73,649.68

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**Attachment C:
High School Math Budget Proposal for
Ongoing Professional Learning**

Oakland Unified School District

May 2020

Budget Proposal for 2020-21

Professional Learning	Purpose	Quantity	Price per unit	Total Cost
May 2020: IM Curriculum Training - Part 1	1-hour virtual training session to explore the problem-based lesson structure of the curriculum and review all IM print/digital instructional materials. This is Part 1 of a 5-part series.	100 teachers and math coaches	Teacher Stipends: \$0 *embedded into contract day Cost of PL facilitators: \$0 *PL led by OUSD employees who are also certified IM facilitators	\$0
May 2020: The Practice of Statistics Curriculum Training	1-hour virtual training session to explore the content of the course and review all print/digital instructional materials.	10 teachers	Teacher Stipends: \$0 *embedded into contract day Cost of PL facilitators: \$0 *PL offered for free by the curriculum writers	\$0
June 2020: IM Curriculum Trainings <ul style="list-style-type: none"> ● Part 1: Problem-Based Lesson Structure ● Part 2: Assessments ● Part 3: Math Language Routines ● Part 4: The 5 Practices ● Part 5: Plan Unit 1 	Each part is a 1-hour virtual session, and each session will be offered twice. Explore the problem-based lesson structure of the curriculum, review all Open Up Resources print/digital instructional materials, and learn to leverage both the 5 Practices framework and instructional routines to foster student discourse. Discover embedded mathematical routines for English learners	60 teachers and math coaches	Teacher Stipends: \$38.50/hour x 5 hrs = \$192.50 per person Cost of PL facilitators: \$0 *PL led by OUSD employees who are also certified IM	\$11,550

	and prepare to teach Unit 1.		facilitators	
August & September 2020: IM Curriculum Trainings <ul style="list-style-type: none"> ● Part 1: Problem-Based Lesson Structure ● Part 2: Assessments ● Part 3: Math Language Routines ● Part 4: The 5 Practices ● Part 5: Plan Unit 1 	For teachers and math coaches who did not attend the June sessions. Each part is a 1-hour virtual session, and each session will be offered twice. Explore the problem-based lesson structure of the curriculum, review all Open Up Resources print/digital instructional materials, and learn to leverage both the 5 Practices framework and instructional routines to foster student discourse. Discover embedded mathematical routines for English learners and prepare to teach Unit 1.	40 teachers and math coaches	Teacher Stipends: \$38.50/hour x 5 hrs = \$192.50 per person Cost of PL facilitators: \$0 *PL led by OUSD employees who are also certified IM facilitators	\$7,700
High School Math Teacher Leadership Collaborative	Monthly collaborative to support teacher leaders from each site to coordinate and facilitate collaboration around the implementation of new curriculum.	15 teacher leaders	Teacher Leader Stipends: \$1,500	\$22,500
Professional Learning Days in September and January: Cross-site collaboration in course teams, facilitated by Secondary Math Coordinator, HS Math Specialist and team of Math Coaches/Leads.	Analyze district assessment data and compare to site-level data. Backwards plan units and lessons. Engage in shared learning around instructional routines to foster student discourse and equitable participation.	110 teachers and math coaches	\$0	\$0
Winter & Spring 2021: Advanced curriculum training sessions	5-part series of 1-hour virtual sessions. Analyze student work, unit assessments, and SBAC IAB data. Backwards plan units and lessons. Engage in shared learning around instructional routines to foster student discourse and equitable participation.	110 teachers and math coaches	Teacher Stipends: \$38.50/hour x 5 hrs = \$192.50 per person Cost of PL facilitators: \$0	\$19,250

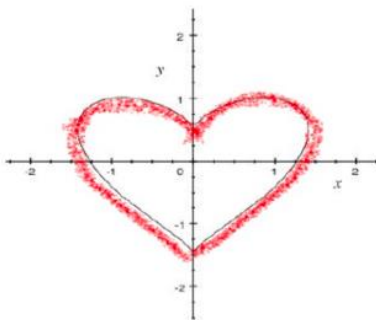
			*PL led by OUSD employees who are also certified IM facilitators	
TOTAL				\$61,000

Budget Proposal for Recurring Annual Expenses, starting in 2021-22

Professional Learning	Purpose	Quantity	Price per unit	Total Cost
June 2021: OUSD Standards & Equity Institute, facilitated by Secondary Math Coordinator, HS Math Specialist and team of Math Coaches/Leads.	Grounding our inquiry in equitable practices, explore the problem-based lesson structure of the curriculum, review all IM print/digital instructional materials, and learn to leverage both the 5 Practices framework and instructional routines to foster student discourse. Discover embedded mathematical routines for English learners and prepare to teach Unit 1.	110 Teachers and math coaches	Stipends for the 5-day Institute: \$38.50/hour x 6.5 hrs x 5 days = \$1,251.25 per person	\$137,637.50
High School Math Teacher Leadership Collaborative	Monthly collaborative to support teacher leaders from each site to coordinate and facilitate collaboration around the implementation of new curriculum.	15 teacher leaders	Teacher Leader Stipends: \$1,500	\$22,500
Monthly on 2nd Wednesdays: Cross-site collaboration in course teams, facilitated by Secondary Math Coordinator, HS Math Specialist and team of Math Coaches/Leads.	Analyze student work, unit assessments, and SBAC IAB data. Backwards plan units and lessons. Engage in shared learning around instructional routines to foster student discourse and equitable participation.	110 teachers and math coaches	\$0	\$0
Professional Learning Days	Analyze district assessment data and compare	110 teachers and	\$0	\$0

<p>in September and January: Cross-site collaboration in course teams, facilitated by Secondary Math Coordinator, HS Math Specialist and team of Math Coaches/Leads.</p>	<p>to site-level data. Backwards plan units and lessons. Engage in shared learning around instructional routines to foster student discourse and equitable participation.</p>	<p>math coaches</p>		
<p>Winter & Spring 2021: Advanced curriculum training sessions</p>	<p>5-part series of 1-hour virtual sessions. Analyze student work, unit assessments, and SBAC IAB data. Backwards plan units and lessons. Engage in shared learning around instructional routines to foster student discourse and equitable participation.</p>	<p>110 teachers and math coaches</p>	<p>Teacher Stipends: \$38.50/hour x 5 hrs = \$192.50 per person</p> <p>Cost of PL facilitators: \$0</p> <p>*PL led by OUSD employees who are also certified IM facilitators</p>	<p>\$19,250</p>
TOTAL				<p>\$179,387.50</p>

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**Attachment D:
Agreement Between
OUSD and Kendall Hunt**

Oakland Unified School District

May 2020

Kendall Hunt

publishing company

4050 Westmark Drive • P O Box 1840 • Dubuque IA 52004-1840

Remit to: Accounts Receivable Department

Federal ID: 42-1426616

GST No: 12494 4703 RT0001

Sales Quote

Page: 1

Quote No.: 15020103

Quote Date: 4/29/2020

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 1000 BROADWAY STE 450
 OAKLAND, CA 94607-4039

Ship

To: OAKLAND UNIFIED SCH WAREHOUSE
 NATALYA LABAUVE WILLIAMS
 900 HIGH ST
 OAKLAND, CA 94601-4405

Ship Date 04/29/20

Due Date 05/29/20

Terms QUOTED

Customer ID 163674

SalesPerson

Ship Via R & L CARRIERS PREPAID

P.O. Number QUOTE

Ship Terms 05/29/20

Returnable	ISBN	Item	Ed	Author	Title	Order Qty	Unit Price	Disc %	Total Price
N	9781524994938	449493	1	Illustrative Mathe	IM: Alg I Supports SE	435	18.99		8,260.65
N	9781524994907	449490	1	Illustrative Mathe	IM: Alg I Units 1-2 Support SE	435			
N	9781524994914	449491	1	Illustrative Mathe	IM: Alg I Units 3-5 Support SE	435			
N	9781524994921	449492	1	Illustrative Mathe	IM: Alg I Units 6-7 Support SE	435			
N	9781524994976	449497	1	Illustrative Mathe	IM: Alg I Supports TG	35	44.99		1,574.65
N	9781524994945	449494	1	Illustrative Mathe	IM: Alg I Units 1-2 Support TG	35			
N	9781524991128	449112	1	Illustrative Mathe	IM: Alg I Units 3-5 Support TG	35			
N	9781524994952	449495	1	Illustrative Mathe	IM: Alg I Units 6-7 Support TG	35			
N	9781524996512	449651	1	Illustrative Mathe	IM: Alg I ES Teacher Res Guide	35			
N	9781524991074	449107	1	Illustrative Mathe	IM: Algebra I Student Edition	2,715	22.99		62,417.85
N	9781524991043	449104	1	Illustrative Mathe	IM: Algebra I Units 1-2 SE	2,715			
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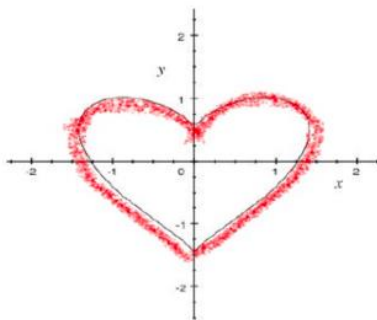
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