June 19, 2009

Dear Members of the Board:

I respectfully submit the following materials for official adoption.

Middle School:
Connected Mathematics Program 2 – Pearson-Prentice Hall, 2009.

High School - German:
Kontakte: A Communicative Approach 6e – McGraw-Hill Higher Education, 2009.

Thank you for your consideration.

Sincerely,

Bonnie G. Lock
District Curriculum Director

La Center School District
Instructional Materials Recommendation
Middle School Mathematics
June 2009

As with both elementary and high school math materials, the middle school math materials were evaluated using AIM (Analyzing Instructional Materials). The AIM Process is an evidence-based process for analyzing instructional materials. La Center first began using this process after participating in a three-year national curriculum leadership academy 2004-2006 held in Richland, WA. Due to the time and resources required to complete a full standards alignment review, the team used

the results of the OSPI standards alignment completed during the winter of 2008-09. No materials met the district standard of 90% or more alignment. Therefore no middle school math materials received a score higher than a 3. A score of 1 was given for anything meeting less than 70% of the standards as defined by the state review. In addition, no accuracy concerns were noted unless specifically identified by a team member.

Members of the La Center Middle School review committee used the same *"Work Teachers Do"* rubric used by both the elementary and high school teams which included a component for "*Parent Communication/Support*". This component assisted in the evaluation of available materials to support students at home. Considering the importance of this element, it was addressed separately in the final evaluation of all five texts available for review. This was especially important since each line item has only a 4% impact on the total score. Therefore teams evaluated "*Parent Communication/Support*" first individually and then jointly considering any communications and available supports including but not limited to newsletters, accessibility of student work samples, vocabulary, textbook support, online tutorials and available additional practice.

Although materials were requested and received, for *Math Thematics,* the preliminary review by members of the review committee did not provide a compelling or justifiable reason to complete the intensive 3-4 hour review completed on the other 4 texts. Therefore no individual scores are reported.

Parent Support Considerations:

Math Connects:
Although there were a variety of online resources (games, tool chest, online student edition, and a media library), the 6th grade materials were included in the elementary site. Resources for the 7th and 8th grade were not accessible through the same site. In addition, it appears at home support is primarily dependent on families having access to technology and Internet. In addition the homework practice booklet and letters to parents are available in both Spanish and English and may be copied to send home.

Holt Matheamtics:
The search of the *Holt Mathematics* Internet site indicated resources were available including virtual manipulatives, a multilingual glossary and lesson tutorials, but no supplemental materials were sent with the review samples. Therefore the team was unable to complete a full review.

Prentice Hall Mathematics: Lots of online resources, including lesson quizzes, online tutorial videos in both Spanish and English and puzzles.

Connected Math Program 2 (CMP 2):
As with *Prentice Hall Mathematics*, there are numerous online resources, including online Spanish and English tutorial videos, homework help, games and vocabulary quizzes. Parent guide includes letters in both Spanish and English that include key concepts of a unit, samples of questions and correct responses and the Internet address of the parent site for those families with Internet access.

Middle School Recommendation: *Connected Mathematics Program 2 (CMP 2)*

The committee felt *Connected Math Program 2* was the only program reviewed that focused on the development of students' abilities to reason and problem solve (District Ends 2c). All other texts provided limited step-by-step processes in the introduction of the lesson. In addition, teachers are already familiar with the *Connected Math* materials and philosophy. Therefore they will be able to more easily identify lessons that may be eliminated without impacting the building of concepts. This provides an opportunity to cover all necessary units...and for students who may require more

challenging content or review, teachers can select out of grade level units to supplement instruction since each unit is in a separate book.

Some concern was expressed during a community forum regarding the readability of the *Connected Math* materials. To address this concern we applied the Flesch-Kincaid readability formula to two potions of the *Connected Math Program 2* student edition of *Looking for Pythagoras.* One section was determined to be at a 7.8 grade level and a second was at 10.1 grade level. Yet, by deleting 3 math terms in the second portion; irrational numbers, Pythagorean Theorem and trigonometry, the text was actually a little below grade level (8.4). This unit is usually taught in the second semester of the 8th grade. Finally, teachers on the team felt that the majority of students would have little or no difficulty with the reading required but for those needing additional support, alternative instructional strategies and supplemental materials could be used. One example would be teaching some math vocabulary such as the three identified terms in the second text example prior to students working individually or reading the text together. Both of these examples also provide teachers the opportunity to help students gain skills to read informational text.

Other considerations:

Connected Math Program 2 (CMP 2) will be more financially feasible to implement. A minimal amount of new manipulative materials will need to be purchased. In some cases no new materials will be required. In addition, teachers already have knowledge of *CMP 2.* We will be able to have more focused professional development that can address mathematics instructional issues.

To score concept development, one major concept taught across the 6-8 band is identified to analyze. Team members analyze the amount of new information that is introduced and the depth of the concept development. Although accessing students' prior knowledge was a key consideration in the development of the concept, repetition was considered a problem, especially considering the number of standards being assessed each year. For the middle school and high school "functions" was identified as the concept. This is a critical concept for student success in secondary mathematics and supports the development of other mathematical concepts. "Functions" was also considered when scoring sequencing and context/connections.

Middle School Mathematics Program Evaluation Results

The four tables on the following pages are organized by the title of the series. The scores are line item scores for each strand of the rubric for each grade level. Scorers were instructed to score 1, 3 or 5. In order to more accurately distinguish how well the materials met the criterion, scores of 2 or 4 were not allowed.

Overall scores for the 4 instructional materials evaluated:

	Math Connects	***Prentice Hall Math***	***Holt Math***	***Connected Math Program 2 (CMP 2)***
Course 1	44.2	58.3	41.7	96.7
Course 2	52.5	53.3	41.25	93.3
Course 3	55.0	55.0	40.0	93.3
Average	50.57	55.53	40.98	94.43

Math Connects

Criteria/Component	Course 1	Course 2	Course 2	Course 3
CONTENT:				
Standards Alignment	1	3	3	3
Accuracy	5	5	5	5
Concept Development	3	1	1	1
Sequencing	5	5	5	5
Context/Connections	1	1	1	1
TOTAL Content Criterion	15	15	15	15
WORK STUDENTS DO:				
Engaging Prior Knowledge/Metacognition	1	1	3	3
Problem Solving	1	1	3	1
Reasoning & Proof	1	1	3	1
Communication	0	1	1	1
Representation	1	1	1	1
Accessibility	5	3	5	3
TOTAL Work Students Do Criterion	9	8	16	10
ASSESSMENT:				
Quality	3	3	5	5
Multiple Measures	1	1	5	5
Use of Assessments	1	1	5	5
Metacognition	1	1	1	1
Accessibility	5	5	5	5
TOTAL Assessment Criterion	11	11	21	21
THE WORK TEACHERS DO:				
Instructional Model	1	1	1	1
Teaching Strategies	1	1	1	1
Support for Work Teachers Do	1	3	3	3
TOTAL Work Teachers Do Criterion	3	5	5	5
GRAND TOTAL	38	39	57	51

TOTAL Content Criterion	6.0	6.0	6.0	6.0
TOTAL Work Students Do Criterion	1.8	1.6	3.2	2.0
TOTAL Assessment Criterion	2.2	2.2	4.2	4.2
TOTAL Work Teachers Do Criterion	0.6	1.0	1.0	1.0
TOTAL	10.6	10.8	14.4	13.2

Weighted Percentage Scores	44.2	45.0	60.0	55.0

Prentice Hall Mathematics

Criteria/Component	Course 1	Course 2	Course 2	Course 3
CONTENT:				
Standards Alignment	3	1	1	3
Accuracy	5	5	5	5
Concept Development	1	1	1	1
Sequencing	5	5	5	5
Context/Connections	1	1	1	1
TOTAL Content Criterion	15	13	13	15
WORK STUDENTS DO:				
Engaging Prior Knowledge/Metacognition	3	3	3	3
Problem Solving	3	3	3	1
Reasoning & Proof	1	1	3	1
Communication	1	1	1	1
Representation	3	1	1	1
Accessibility	5	1	5	3
TOTAL Work Students Do Criterion	16	10	16	10
ASSESSMENT:				
Quality	3	5	5	5
Multiple Measures	5	5	5	5
Use of Assessments	5	5	5	5
Metacognition	1	1	1	1
Accessibility	5	5	5	5
TOTAL Assessment Criterion	19	21	21	21
THE WORK TEACHERS DO:				
Instructional Model	1	3	1	1
Teaching Strategies	1	1	1	1
Support for Work Teachers Do	3	3	3	3
TOTAL Work Teachers Do Criterion	5	7	1	5
GRAND TOTAL	55	51	51	51

TOTAL Content Criterion	6	5.2	5.2	6
TOTAL Work Students Do Criterion	3.2	2	3.2	2
TOTAL Assessment Criterion	3.8	4.2	4.2	4.2
TOTAL Work Teachers Do Criterion	1	1.4	0.2	1
TOTAL	14.00	12.80	12.80	13.20

Weighted Percentage Score	58.3	53.3	53.3	55.0

Holt Mathematics

Criteria/Component	Course 1	Course 2	Course 2	Course 3
CONTENT:				
Standards Alignment	3	3	3	3
Accuracy	5	5	5	5
Concept Development	3	3	3	1
Sequencing	5	3	3	3
Context/Connections	1	3	1	1
TOTAL Content Criterion	17	17	15	13
WORK STUDENTS DO:				
Engaging Prior Knowledge/Metacognition	0	1	1	3
Problem Solving	1	1	1	1
Reasoning & Proof	1	1	1	1
Communication	1	1	1	1
Representation	0	1	1	1
Accessibility	0	1	1	5
TOTAL Work Students Do Criterion	3	6	6	12
ASSESSMENT:				
Quality	3	2	3	1
Multiple Measures	0	1	1	1
Use of Assessments	3	1	1	1
Metacognition	1	1	1	1
Accessibility	5	1	1	1
TOTAL Assessment Criterion	12	6	7	5
THE WORK TEACHERS DO:				
Instructional Model	1	1	3	1
Teaching Strategies	0	1	1	1
Support for Work Teachers Do	0	3	1	3
TOTAL Work Teachers Do Criterion	1	5	5	5
GRAND TOTAL	33	34	33	35

TOTAL Content Criterion	6.8	6.8	6	5.2
TOTAL Work Students Do Criterion	0.6	1.2	1.2	2.4
TOTAL Assessment Criterion	2.4	1.2	1.4	1
TOTAL Work Teachers Do Criterion	0.2	1	1	1
TOTAL	10.00	10.20	9.60	9.60

Weighted Percentage Score	41.7	42.5	40.0	40.0

PO Box 1840 • 725 Highland Road
La Center, WA 98629
Tel 360.263.2131 • Fax 360.263.1140

Connected Math Program 2 (CMP 2)

Criteria/Component	Course 1	Course 2	Course 2	Course 3
CONTENT:				
Standards Alignment	3	NA	1	1
Accuracy	5		5	5
Concept Development	5		5	5
Sequencing	5		5	5
Context/Connections	5		5	5
TOTAL Content Criterion	23	0	21	21
WORK STUDENTS DO:				
Engaging Prior Knowledge/Metacognition	5		5	5
Problem Solving	5		5	5
Reasoning & Proof	5		5	5
Communication	5		5	5
Representation	5		5	5
Accessibility	5		5	5
TOTAL Work Students Do Criterion	30	0	30	30
ASSESSMENT:				
Quality	5		5	5
Multiple Measures	5		5	5
Use of Assessments	5		5	5
Metacognition	5		5	5
Accessibility	5		5	5
TOTAL Assessment Criterion	25	0	25	25
THE WORK TEACHERS DO:				
Instructional Model	5		5	5
Teaching Strategies	5		5	5
Support for Work Teachers Do	5		5	5
TOTAL Work Teachers Do Criterion	15	0	15	15
GRAND TOTAL	93	0	91	91

TOTAL Content Criterion	9.2	0	8.4	8.4
TOTAL Work Students Do Criterion	6	0	6	6
TOTAL Assessment Criterion	5	0	5	5
TOTAL Work Teachers Do Criterion	3	0	3	3
TOTAL	23.2	0	22.4	22.4

Weighted Percentage Score	96.7	NA*	93.3	93.3

*Although actual data is not available, both evaluators were similar enough in scores not to alter the final scores for level 2.