



**STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
KA 'OIHANA HO'ONA'AUAO  
P.O. BOX 2360  
HONOLULU, HAWAII 96804**

OFFICE OF THE DEPUTY SUPERINTENDENT OF ACADEMICS

October 9, 2025

TO: The Honorable William Arakaki

FROM:

Heidi Armstrong  
Deputy Superintendent

A handwritten signature in blue ink, appearing to read "Heidi Armstrong".

SUBJECT: Department of Education presentation on Strategic Plan Goal 1.1 (All students experience rigorous, high-quality learning that results in equitable outcomes for all learners): Baldwin-Kekaulike-Kūlanihāko'i-Maui Complex Area math momentum to drive student achievement

1. EXECUTIVE SUMMARY

Baldwin-Kekaulike-Kūlanihāko'i-Maui (BKKM) Math Momentum to Drive Student Achievement is designed to fulfill Goal 1.1: All students experience rigorous, high-quality learning that results in equitable outcomes for all learners.

The BKKM Complex Area is committed to improving student outcomes by engaging teachers and instructional coaches in ongoing, sustained professional learning focused on content, coaching, and pedagogy. This system provides comprehensive training on impactful Tier 1 instructional strategies designed to strengthen key fluencies and mathematical discourse. To ensure successful implementation, teachers receive sustained support through lesson planning, co-teaching, classroom visits, and debriefs. Furthermore, monthly stakeholder meetings support the development of a comprehensive assessment plan that uses data analysis to drive targeted instruction and improve student learning.

**Highlights of the BKKM Complex Area**

- The complex area continues to advance a sense of belonging for all students through active engagement with Student Voice, implementation of a rigorous English Language Arts curriculum, and the intentional recognition and celebration of the diverse cultures represented across the complex.

### **BKKM Elementary Mathematics Project**

- The Elementary Mathematics Project provides professional learning with a focus on *Number Talks*, designed to strengthen mathematical fluency and promote meaningful mathematical discourse.
- Supports for teachers include standards-based professional development, classroom lesson demonstrations, instructional visits, post-lesson debriefs, and monthly school-level coaching meetings.

### **BKKM Secondary Mathematics Project**

- The Secondary Mathematics Project is designed to enhance instructional practices through two key strategies:
  1. **Secondary Mathematics Leadership Collaboratives:** Conducted quarterly, these sessions convene Math department heads, administrators, and other educational leaders to develop assessment plans, analyze school- and complex-level data, and identify priority standards.
  2. **Professional Learning in Building Thinking Classrooms in Mathematics:** Educators participate in lesson planning and co-teaching designed to ensure mathematics instruction is consistently rigorous, engaging, and aligned to state standards.

### **Additional Mathematics Initiatives**

- The 4th Grade Educator Leadership Assessment Collaborative is developing a comprehensive assessment plan to strengthen instructional alignment.
- Parent and community engagement is being advanced through Math festivals, which provide families with opportunities to experience mathematics learning in interactive and meaningful ways.
- *Building Thinking Classrooms* instructional strategies are being extended to the 5th-grade level, further supporting a culture of active problem-solving and student engagement in mathematics.

### 2. DESCRIPTION

The presentation, “Baldwin-Kekaulike-Kūlanihāko‘i-Maui Math Momentum to Drive Student Achievement,” will provide a high-level overview of the BKKM strategic approach to achieving Goal 1.1.

The BKKM Complex Area strives to get students globally competitive through various learning opportunities, and locally committed by engaging them in the HĀ framework,

knowing who they are, where they come from, and the *kuleana* (responsibility) they have to take care of their family and community. An important component is amplifying student voices by sharing realistic suggestions for the good of the whole and accepting responsibility for what is said and what needs to be done. This extends across all subjects, including English Language Arts, that foster critical thinking and communication skills. The focus of this presentation will outline how the complex area team works together to provide professional development, coaching, professional learning communities, and assessment practices to improve math proficiency.

3. PRESENTATION

Presentation on Goal 1.1: All students experience rigorous, high-quality learning that results in equitable outcomes for all learners: Baldwin-Kekaulike-Kūlanihāko‘i-Maui Complex Area Math Momentum to Drive Student Achievement

HA:ly  
Attachment

c: Baldwin-Kekaulike-Kūlanihāko‘i-Maui Complex Area



## HAWAI'I STATE DEPARTMENT OF EDUCATION



Department of Education presentation on Strategic Plan Goal 1.1 (All Students experience rigorous, high-quality learning that results in equitable outcomes for all learners):

Baldwin-Kekaulike-Kūlanihāko'i-Maui Complex Area math momentum to drive student achievement

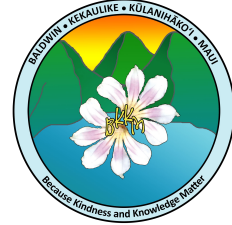
Hawai'i State Board of Education  
Student Achievement Committee  
October 9, 2025

**Lori Yatsushiro** *Complex Area Superintendent*  
**Shannon Kealoha** *Math Resource Teacher*  
**Kindra Sabado** *Curriculum Coordinator, Lihikai Elementary School*

Remembering our friends  
and family impacted by the  
August 2023 wildfires

# Demographics

- **Number of schools**
  - Elementary: 13
  - Middle: 4
  - High: 4
- **Student enrollment**
  - 14,551
- **Total staff**
  - **School level:**
    - Certificated Staff: 1,292
    - Classified Staff: 766
  - **Complex Area level:**
    - Certificated Staff: 18
    - Classified Staff: 121

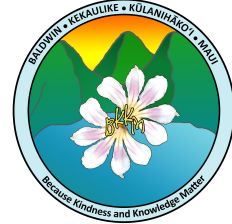


*Esports presentation at the Educational Leadership Institute (ELI)*



# Complex Area

Baldwin-Kekaulike-Kūlanihāko‘i-Maui (BKKM)  
Complex Area administrators reflected on our WHY,  
core beliefs, and grounded ourselves in the place  
and people we serve.



*The first BKKM Principals Meeting of the year.*



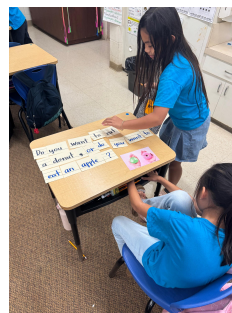
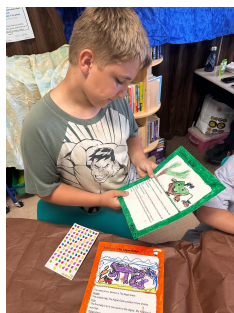
*First Round of Most Valuable Vice  
Principal (MVVP) HĀ awards.*



# BKKM Complex Area Highlights



*Cultural dances shared at the English Learners Design Team Meeting.*



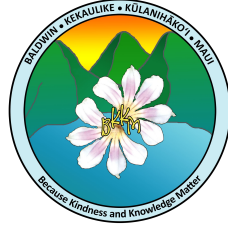
*English Language Arts Writing Project.*



*Student voice in action*



# BKKM Math Project Vision



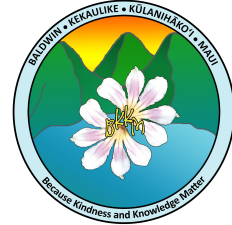
***Our vision is to transform classrooms into learning spaces where students are engaged in tasks, persevering through problems, talking with one another about mathematics, making connections, and in the end, are able to demonstrate understanding of the mathematics.***

**Objectives:**

- Fluency
- Mathematical Discourse



# BKKM Elementary Math Project



## Number Talks Teacher Professional Learning (based on Sherry Parrish's book *Number Talks*):

- Implement Number Talks 4-5 times/week
- Three cycles of Number Talks training:
  - Gr. 3-5: Addition, Subtraction & Multiplication/Division
  - Gr. K-2: Number Sense, Use of Models & Addition/Subtraction
- Three cycles of lesson demonstrations
- Three cycles class visits and lesson debriefs

## Math Coaches Professional Learning:

- Six coaches meetings
- Support teachers with implementation of Number Talks

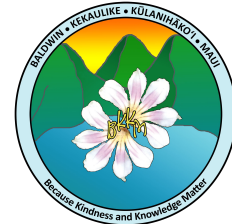
## Complex-wide Fraction & Decimal Fraction Professional Development

| School Year | All Grades Tested | Grade 3 | Grade 4 | Grade 5 |
|-------------|-------------------|---------|---------|---------|
| 2016-17     | 36.80%            | 51.10%  | 49.90%  | 40.20%  |
| 2017-18     | 39.50%            | 56.70%  | 46.40%  | 48.20%  |
| 2018-19     | 40.00%            | 58.60%  | 47.60%  | 45.00%  |
| 2019-20     | n/a               | n/a     | n/a     | n/a     |
| 2020-21     | 26.40%            | 35.10%  | 29.10%  | 27.50%  |
| 2021-22     | 33.50%            | 46.90%  | 40.90%  | 37.90%  |
| 2022-23     | 33.90%            | 46.70%  | 44.80%  | 40.50%  |
| 2023-24     | 33.50%            | 50.60%  | 40.70%  | 39.60%  |
| 2024-25     | 35.54%            | 50.00%  | 44.00%  | 42.00%  |

*Smarter Balanced Assessment Math  
Proficiency Percentages*



# BKKM Secondary Math Project

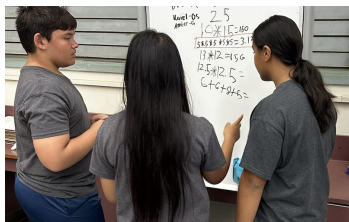


## Secondary Math Leadership Collaborative

- Led by CAS Yatsushiro and Math Resource Teachers
- Four middle schools and four high schools
- School Team: Administrator, Curriculum Coordinator, Math Coach/Department Head
- Meets quarterly

## Building Thinking Classrooms in Mathematics (BTC)

- Complex provides four days of Professional Development based on Dr. Peter Liljedahl's work.
- Teacher classroom support consists of two days of planning and co-teaching.



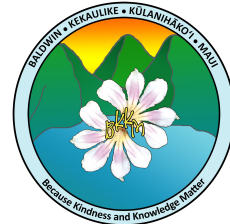
Students engaged in  
Building Thinking Classroom  
Task.

| School Year | All Grades Tested | Grade 6 | Grade 7 | Grade 8 | Grade 11 |
|-------------|-------------------|---------|---------|---------|----------|
| 2016-17     | 36.80%            | 31.00%  | 23.60%  | 27.00%  | 28.40%   |
| 2017-18     | 39.50%            | 26.40%  | 28.00%  | 35.40%  | 30.30%   |
| 2018-19     | 40.00%            | 29.30%  | 29.80%  | 38.30%  | 25.90%   |
| 2019-20     | n/a               | n/a     | n/a     | n/a     | n/a      |
| 2020-21     | 26.40%            | 17.90%  | 22.60%  | 22.10%  | 28.10%   |
| 2021-22     | 33.50%            | 23.50%  | 26.80%  | 28.10%  | 24.60%   |
| 2022-23     | 33.90%            | 27.10%  | 23.60%  | 25.50%  | 22.30%   |
| 2023-24     | 33.50%            | 27.30%  | 26.00%  | 25.70%  | 21.90%   |
| 2024-25     | 35.54%            | 30.00%  | 30.00%  | 31.00%  | 20.00%   |

*Smarter Balanced Assessment Math  
Proficiency Percentages*



# More Math Highlights



*Grade 4 Educator Leadership Assessment Collaborative: A partnership with the State Assessment Office and New Teacher Center.*



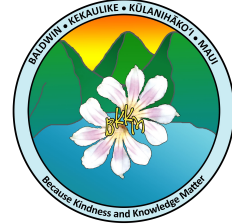
*Students discovering Math Joy!  
Julia Robinson Math Festival*



*Grade 5 teachers engaged in Elementary Building Thinking Classrooms Professional Development*

# What Support Can the Board Provide?

- Continue to support state leadership in empowering our schools to ensure our students are Globally Competitive and Locally Committed
- Continue to support a budget that empowers us to carry out the important work our schools require
- Continue to seek and consider our input as part of the policy development process



*Papa Froggy greeting nā haumana at the Pā'ia mālā*