

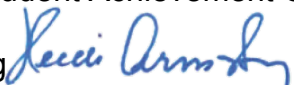


STATE OF HAWAII
DEPARTMENT OF EDUCATION
KA 'OIHANA HO'ONA'AUAO
P.O. BOX 2360
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OFFICE OF THE DEPUTY SUPERINTENDENT OF ACADEMICS

April 9, 2026

TO: The Honorable William Arakaki
Chairperson, Student Achievement Committee

FROM: Heidi Armstrong 
Deputy Superintendent of Academics

SUBJECT: Department of Education presentation on Goal 1.1 (All students experience rigorous, high-quality learning that results in equitable outcomes for all learners): Kailua-Kalāheo Complex Area - Mathematics professional learning to support student success

1. EXECUTIVE SUMMARY

The Kailua-Kalāheo Complex Area has a comprehensive strategy aligned with Hawai'i Department of Education Strategic Plan Goal 1.1.3 to enhance student mathematics proficiency through targeted professional learning. Key efforts include Building Thinking Classrooms (BTC) and fluency training, teacher leadership structures such as Math Task Force and Instructional Leadership Teams (ILT), as well as courses for individual teachers. Through these professional learning initiatives, the Kailua-Kalāheo Complex Area is fostering a culture where data informs instruction and collaboration drives results. Ultimately, ensuring that every student in the Kailua-Kalāheo complex area pipeline has access to high-quality, rigorous mathematics instruction.

2. DESCRIPTION

The presentation highlights initiatives that aim to foster an equitable mathematical culture supported by effective teaching practices, which are grounded in the National Council of Teachers of Mathematics (NCTM) standards. The presentation shows evidence of correlation between these professional development efforts and student achievement improvements.

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3. PRESENTATION

Department of Education presentation on Goal 1.1 (All students experience rigorous, high-quality learning that results in equitable outcomes for all learners): Kailua-Kalāheo Complex Area - Mathematics professional learning to support student success.

HA:jm
Attachment

c: Kailua-Kalāheo Complex Area



HAWAI'I STATE DEPARTMENT OF EDUCATION

Department of Education presentation on Goal 1.1 (All students experience rigorous, high-quality learning that results in equitable outcomes for all learners): Kailua-Kalāheo Complex Area - Mathematics professional learning to support student success

Hawai'i State Board of Education
Student Achievement Committee
April 9, 2026

Lanelle Hibbs, *Complex Area Superintendent, Kailua-Kalāheo Complex Area*
Candice Frontiera, *School Renewal Specialist, Kailua-Kalāheo Complex Area*

Kailua and Kalāheo High School math teachers observing Algebra 2 Building Thinking Classrooms (BTC) lesson



Demographics

- **Number of schools:**
 - Elementary: 9
 - Elementary & Intermediate: 1
 - Intermediate: 1
 - Intermediate & High: 1
 - High: 2
- **Student enrollment:** 6,098
- **Total staff:**
 - School level: 573
 - Complex area level: 43



We serve diverse communities from Waimānalo, to Kailua, to the Kāneʻohe Marine Corps Base.



Complex Area Highlights

- Engaging PK-12 teachers in research-based, professional learning
- Developing teacher leaders through complex math task forces
- Cementing lasting change through multi-year professional growth



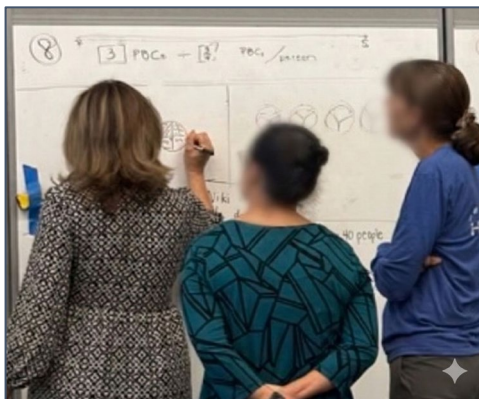
8 Effective Mathematics Teaching Practices, adapted from Principles to Action: Ensuring Mathematical Success for All, National Council of Teachers of Mathematics, 2024



Complex Area Highlights



Kalāheo Math Task Force, March 2026



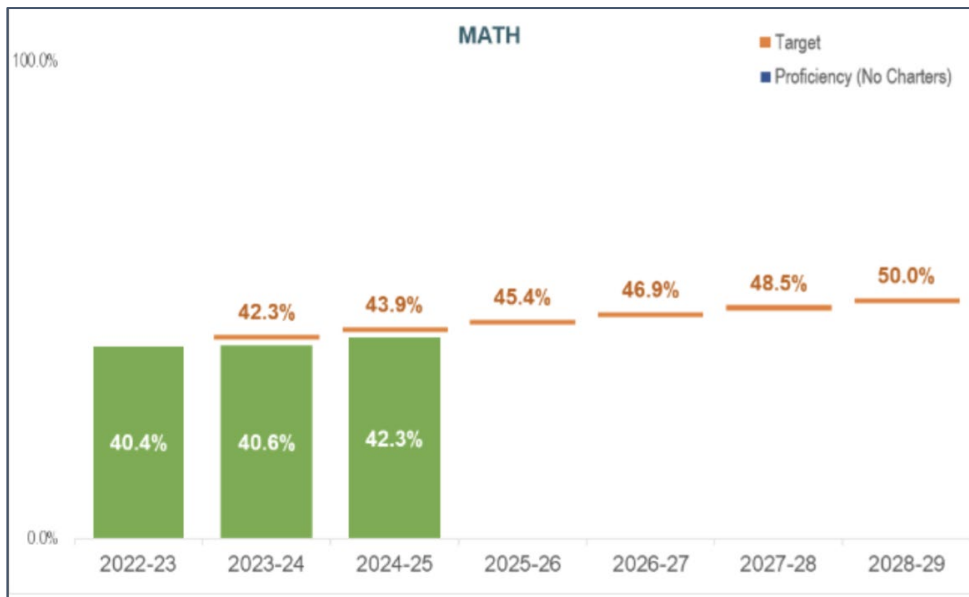
Teachers Engaging in BTC Level 1 Professional Development (PD), December 2025



Math Lab Cohort, Observing Grade 5 Lesson, February 2026



Complex Area Highlights



The Kailua-Kalāheo Complex Area is showing concrete progress towards statewide targets in math.

	Scale Score	Performance
State	2485 ± 1	 Percent: 21% 28% 25% 26% Count: 2.6K 3.4K 3K 3.1K
Complex Area	2504 ± 4	 Percent: 14% 28% 29% 29% Count: 63 124 130 131
Complex	2509 ± 8	 Percent: 15% 25% 27% 33% Count: 25 42 45 55
School	2545 ± 14	 Percent: 25% 36% 39% Count: 11 16 17

Correlation between implementation of professional learning and student achievement is evidenced by disaggregating Smarter Balanced Assessment results. In this example, Grade 4 showed high levels of proficiency in a school where all teachers were trained in BTC SY 24-25.



Target Areas of Focus

- **Building Thinking Classrooms in Mathematics (BTC)**
 - BTC Level 1 - new to the practices
 - BTC Level 2 - sustaining implementation of the practices
 - BTC Level 3 - developing lessons and receiving feedback from peers of implementation of the practices
- **Figuring Out Fluency**
 - Level 1 - entire complex area K-6 overview of mathematical fluency and its components and application
 - Level 2 - building deeper understanding of the key strategies that build fluency

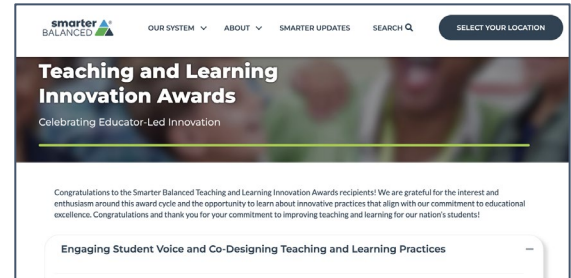


Complex Area K-6 Fluency Level 1 PD, August 2025



Target Areas of Focus

- **Math Task Force**
 - Kailua Math Task Force in year 3. Focus is on 8 effective mathematics teaching practices
 - Growing as leaders
 - Kalāheo Math Task Force in year 6. Focus on mathematical mindset.
 - Grade level lesson study
- **School level professional learning**
 - BTC
 - Math Lab Cohort
 - Fluency
 - Productive Struggle
 - Small group instruction
 - Mathematical discourse



Current recipients of the Smarter Balanced Teaching and Learning Innovation Award



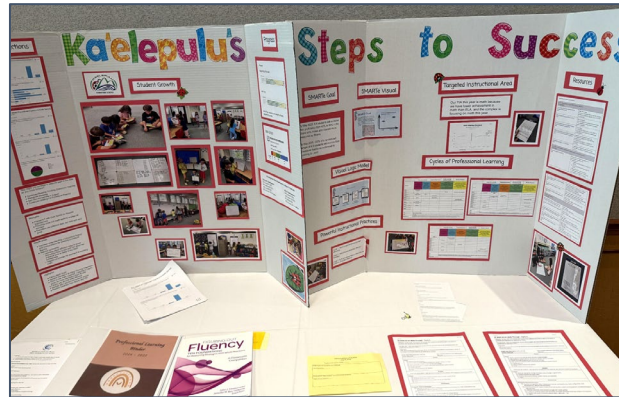
School level professional learning, BTC PD #4, January 2026



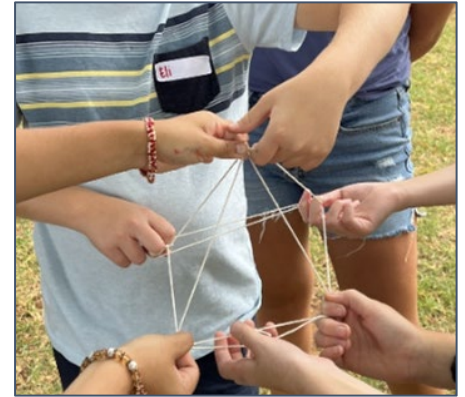
Other Highlights



Students reflecting on productive mathematics struggle, Grade 4, January 2026.



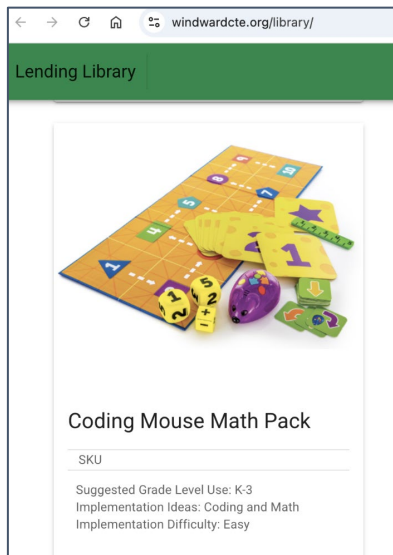
Instructional Leadership Teams empower teacher leaders in selecting professional development and tracking impact, May 2025.



Math camps have been running for multiple years over summer as an opportunity for teachers to try new practices and engage students in rich tasks that strengthen growth mindset.



Other Highlights



Academic Integration Team integrates across content areas and sponsors a lending library of resources.



Parents are engaged through opportunities to play fluency games after school and we are producing videos of how to play fluency games at home or on-the-go!



Teachers from our complex area have won awards and have presented at international professional conferences.



What Support Can the Board Provide?

- Continue to prioritize professional learning
- Continue to support and strengthen complex area systems that support teacher and student learning through a strong tri-level system
- Funding math coaches and math resource teacher positions that can build the capacity of others through supports such as model lessons



Mathematics Resource Teacher facilitating co-planned lesson with Grade 1, March 2026.