TECHNOLOGY, MEDIA, AND DESIGN IMPACT REPORT

Academic Year 2025-2026: Realizing the Technology Roadmap

This report reflects on our progress in technology and library learning across all three branches. By evaluating student growth against our core competencies, we measure our progress toward the Holland Hall Technology Roadmap. Our goal remains to navigate toward our mission of social responsibility and lifelong learning while providing strategic clarity for the future.

Major Institutional Milestones

This year was defined by foundational restructuring and strategic growth:

- **Departmental Rebranding:** Formally established the Upper School TMD department to better reflect our integrated approach to digital literacy and creative problem-solving. We want to also acknowledge that some faculty contributing to this report serve in our library department.
- **Faculty Expansion:** Hired dedicated Middle School Design and Innovation faculty to deepen STEM integrations.
- **Strategic AI Leadership:** Headed the Strategic Planning Committee's investigations into AI policy, establishing forward-thinking guidelines for generative AI in education.
- **Summer Programming:** Launched a new Summer Digital Literacy Course to support continuous student development.

Primary School: Building the Fundamentals

Primary School initiatives focus on establishing a secure and innovative foundation for our youngest learners:

- **iPad Initiative Expansion:** Scaled the 1:1 iPad program to enhance personalized learning and early digital literacy.
- **Introduction to Robotics:** implemented basic programming lessons with a variety of age appropriate robots.
- **Foundational Coding:** Introduced computational thinking through creative, block-based coding platforms.

Middle School: Engineering and Exploration

Middle School programming expanded hands-on engineering and computational thinking to foster inclusivity in STEM.

Digital Fluency: Keyboarding Milestones

Focused, data-driven typing instruction yielded significant growth in student digital fluency:

GRADE LEVEL	INITIAL AVERAGE	FINAL AVERAGE
4th Grade	8 WPM	18 WPM
5th Grade	19 WPM	29 WPM

Middle School Highlights

- **Apple Recognition:** The Middle School is officially independently recognized as an Apple Distinguished Schools.
- **Interdisciplinary 4th Grade Core:** Students mastered foundational skills in Code.org, Tinkercad, and Google Suite, integrating STEM into America Day projects and literacy analysis.
- **The Design Process in Action:** 5th graders engaged deeply with the STEM Design Process, learning to navigate constraints and embrace iterative design.
- **Robotics & Coding:** 5th-grade science classes coded robotics using VEX AIM, while 7th and 8th graders explored advanced computational thinking and AI literacy via Code.org.
- **Girls in STEM Outreach:** Cultivated partnerships with OSU Health Sciences and the Oklahoma Science Museum to inspire future female engineers.
- **FlintAI*:** Rolled out in the middle school with faculty professional development ongoing. 6th through 8th grade have access.

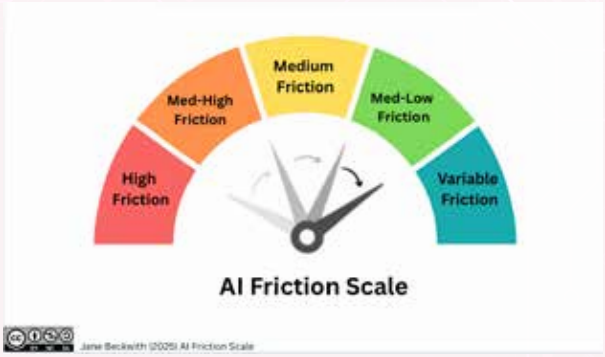
To learn more about Holland Hall's Technology Roadmap visit hhtechnologyroadmap.info

Upper School: Advanced Computing & Media

Upper School courses challenged students to apply high-level computational thinking and professional industry workflows.

- **Apple Recognition:** The Upper School is officially independently recognized as an Apple Distinguished Schools.
- **Advanced Computing:** A total of 84 students mastered coding fundamentals through AP Computer Science Principles and Applied Technology Principles.
- **AI Integration:** Deployed FlintAI* within the curriculum and hosted a collaborative campus AI Meetup.
- **Professional Media Production:** The student-led Yearbook project refined an industry-standard graphic design workflow, utilizing Adobe Photoshop and InDesign for high-quality publication.
- **Digital Arts:** Courses in Photographic Arts and New Media Arts emphasized aesthetics and technical mastery of Macbook workflows and digital darkroom techniques.
- **Technical Theatre:** Students gained hands-on experience in technical theatre, supporting various student productions within the fine arts program.
- **Competitive Robotics:** Completed its inaugural year, born out of a collaboration between parents and students.

AI Friction Scale



Most scales categorize what AI involvement is permitted. The AI Friction Scale explains why a boundary exists – focusing on intentional cognitive challenge ("productive struggle") to protect intellectual growth and mastery of competencies, skills, and content knowledge. While AI tools are engineered to eliminate friction, learning requires it. The AI Friction Scale helps students and teachers calibrate the essential cognitive work (retrieval, critical synthesis, and evaluation) needed for enduring understanding and authentic mastery.

To learn more about the AI Friction Scale, scan the code to the right.

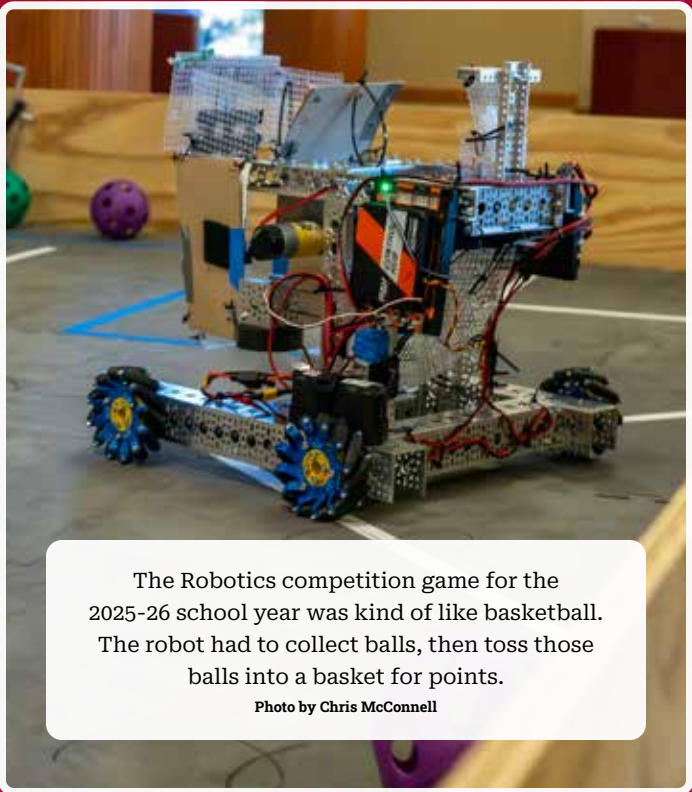
Strategic Vision: 2026-2027

To build on this year's momentum, the TMD department has identified four keys to the future:

1. **Refine Assessment Metrics:** Deepen the connection between student work and defined competencies.
2. **Infrastructure Expansion:** Launch the new Middle School Maker-Space.
3. **Ethical AI Implementation:** Establish and dynamically refine school-wide AI policy frameworks to guide the safe and innovative integration of evolving technologies.
4. **Engineering Methodology:** Develop a PreK-12 design-thinking methodology to connect TMD efforts with the Science department through problem-based learning and CAD tools.



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The Robotics competition game for the 2025-26 school year was kind of like basketball. The robot had to collect balls, then toss those balls into a basket for points.

Photo by Chris McConnell

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*For more information on FlintAI visit flintk12.com