



**California Mathematics  
Project:  
North Coast**

**12 Public Local Education  
Agencies from Marin City to  
West Marin**



**MARIN COUNTY  
OFFICE OF EDUCATION**  
building the future... one student at a time

**Youth in Arts®**

**Advancing Teaching & Learning in the Arts and Sciences  
(ATLAS)**

**Student Support & Academic Enrichment Grant (SSAE)  
Executive Summary  
2018-2019**

*Providing a Sustainable Road Map towards Equitable and Inclusionary Practices in  
the Arts and STEAM Education Across the North Bay.*

*Driving Question & Overview...*

How does infusing the arts into general and special education classrooms as well as summer programs increase student engagement and deepen student learning?

Imagine learning in an environment that utilizes Art, Science, Social Studies, Math, and English Language Arts to explore and navigate through an environmental phenomenon or dilemma utilizing an inquiry based lens. Now, envision a classroom that provides students with a variety of ways to access the content and provides opportunities for students to express their learning.

Marin County Office of Education (MCOE) with a consortium of districts across Marin was awarded a grant of approximately \$500,000 from the California Department of Education for the spring and summer of 2019 to focus on integrated instruction through the arts and science with an emphasis on content accessibility. MCOE, in collaboration with Youth In Arts, Ten Strands, State Education & Environment Roundtable (SEER), Marin Environmental Literacy Collaborative (MELC), California Math Project North Coast, and Local Education Agencies will be providing interdisciplinary science and art professional development for teachers.

The North Bay Consortium grant, Advancing Teaching & Learning in the Arts and Sciences (ATLAS), is designed to provide a sustainable road map towards equitable and inclusionary practices in Visual & Performing Arts and integrated STEAM (Science, Technology, Engineering, Arts, Math) education across the North Bay region and beyond.

*Why...*

In Marin County, we have a huge academic achievement gap. In fact, of all 58 counties in the state of California, the racial/ethnic performance gap in Marin county is the widest, according to the latest available data from RaceCounts.org:

- In 2017, Hispanic-Latino (28%), English Learners (15%) and socio-economically disadvantaged (28%) students met college-career readiness indicators.
- Statewide and according to 2018 CAASPP mathematics data, CASchoolDashboard.org reported that students with disabilities scored 125 points BELOW standard while English Learners scored 70 points below standard. To explore the performance of State of

**BUILDING THE FUTURE . . . ONE STUDENT AT A TIME**

## Teachers & Administrators *WANT* this...



Prior to writing the grant, several meetings with all stakeholders, including teachers, administrators, coaches and community based environmental agencies came together to determine the greatest area of need in our educational community. They described the need to develop strategies for improved arts integration and more effective partnering with resident artists.

Most of our schools do not have full-time credentialed art teachers and our special education teachers and paraprofessionals described their unmet needs including artists support in the classroom, arts education workshops, and training in arts education.

A voluntary questionnaire completed by 187 classroom teachers and coaches, throughout the region, indicated high levels of interest (**139 affirmatives**) for participation in a STEAM Summer Institute. One participant commented:

"I would be especially interested in exploring the ways we can provide STEAM experiences for our low income English Learners. I feel like this is a population who are often left out of these experiences" and "Combining art with math and science in lessons deepens understanding and engagement; it also prepares students for real-world creative problem-solving in many industries."

## Goals, Strategies & Evaluation...

Our overarching goal: to provide a well-rounded education through the integration of arts using a focus of equity and access. This integration will provide students with a higher level of engagement and deepen their understanding of the content. To do this, we established three major goals with evidence-based strategies to fulfill our endeavor. A Comprehensive Evaluation Plan will ensure the project is meeting its goals and objectives while also addressing larger research questions. Please refer to Figure 1 that follows.

Figure 1: ATLAS Goals and Evidence Based Strategies to Provide a Well-Rounded Education

Goal	Evidence-Based Strategies	Evaluation
<b>1-Enhance Art Access</b>	In partnership with Youth In Arts supports arts integration and arts access through workshops, coaching, and seminars with a concentration on expanding arts access to students with disabilities.	1-Have SDC, paraprofessionals, and resource teachers increased their understanding, skills, and capacity to teach/integrate art as a result of professional learning? 2-Are special education students given more art-based learning opportunities? 3-How do teachers use Open Education Resources (OER) materials?
<b>2-Improve STEAM Education</b>	In partnership with STEAM leaders and county educators, develop and implement STEAM professional learning and follow-up with sixty to seventy K-12 educators across 12 districts.	1-Are educators learning the STEAM content and methods for integration? 2-Are educators developing quality units that can be implemented? 3-Do educators develop shared accountability for their peer and their students learning?

<b>3-Engage ALL Learners</b>	Support educators in design of PBL lessons. Support professional learning for summer school educators to implement pilot Summer Environmental Leadership Academy.	1-Are PBL units developed using the TRU framework? 2-How if, and when do students develop sense of agency, identity and authority? 3-Do summer teachers transfer this experience to their traditional (non-summer) classroom experience?
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Professional learning will be provided to see the local phenomena and align that phenomena with the grade level science standards, thus making the science relevant and meaningful to the students. Using a focus of equity and access, all students will experience the natural world around them.

Our professional learning methods and approach are aligned to the Report - *Greatness by Design: Supporting Outstanding Teaching to Sustain a Golden State* (GbD), a report published by the California Educator Excellence Task Force. The report, as in our ATLAS plan, calls for a focus on students with disabilities; students from minority cultural, racial, and linguistic subgroups; and students from low-income families. The Superintendent's Quality Professional Learning Standards (QPLS) present the elements of a quality professional learning system, Our ATLAS model reflects key elements of the QPLS. Refer to **Appendix A** that outlines this connection.

**Appendix A:  
The ATLAS Model and Alignment to Quality Professional Learning Standards**

QPLS	THE ATLAS MODEL
<b>Content &amp; Pedagogy:</b> <i>Enhance educators' expertise to increase students' capacity to learn and thrive.</i>	Use of subject matter (science, arts, math, social studies, literacy) and pedagogy consultants (SME), district coaches, and other supports to structure and design engaging educator learning experiences.
<b>Equity:</b> <i>Equitable access, opportunities, and outcomes; address achievement and opportunity disparities between groups.</i>	Focus on engaging learning that supports access for all students by using TRU framework as a guideline for planning. These are designed to socio-economically disadvantaged backgrounds, English learners, and traditionally underrepresented in advanced science and math.
<b>Design &amp; Structure:</b> <i>Evidence-Based approaches, recognizing that focused, sustained learning enables educators to acquire, implement, and assess improved practices</i>	Use of focused and coherent teaching practices that are research-based, implement and learn, and have been demonstrated to improve student engagement and efficacy.
<b>Collaboration &amp; Shared Accountability:</b> <i>Quality professional learning facilitates the development of a shared purpose for student learning and collective responsibility for achieving it.</i>	Designed to create team-teaching cohort model and includes development of units, sharing and distribution of resources and alignment with school, district and countywide strategies, and to diminish the silo impact of teaching, through both integrated content teaching and shared outcomes.