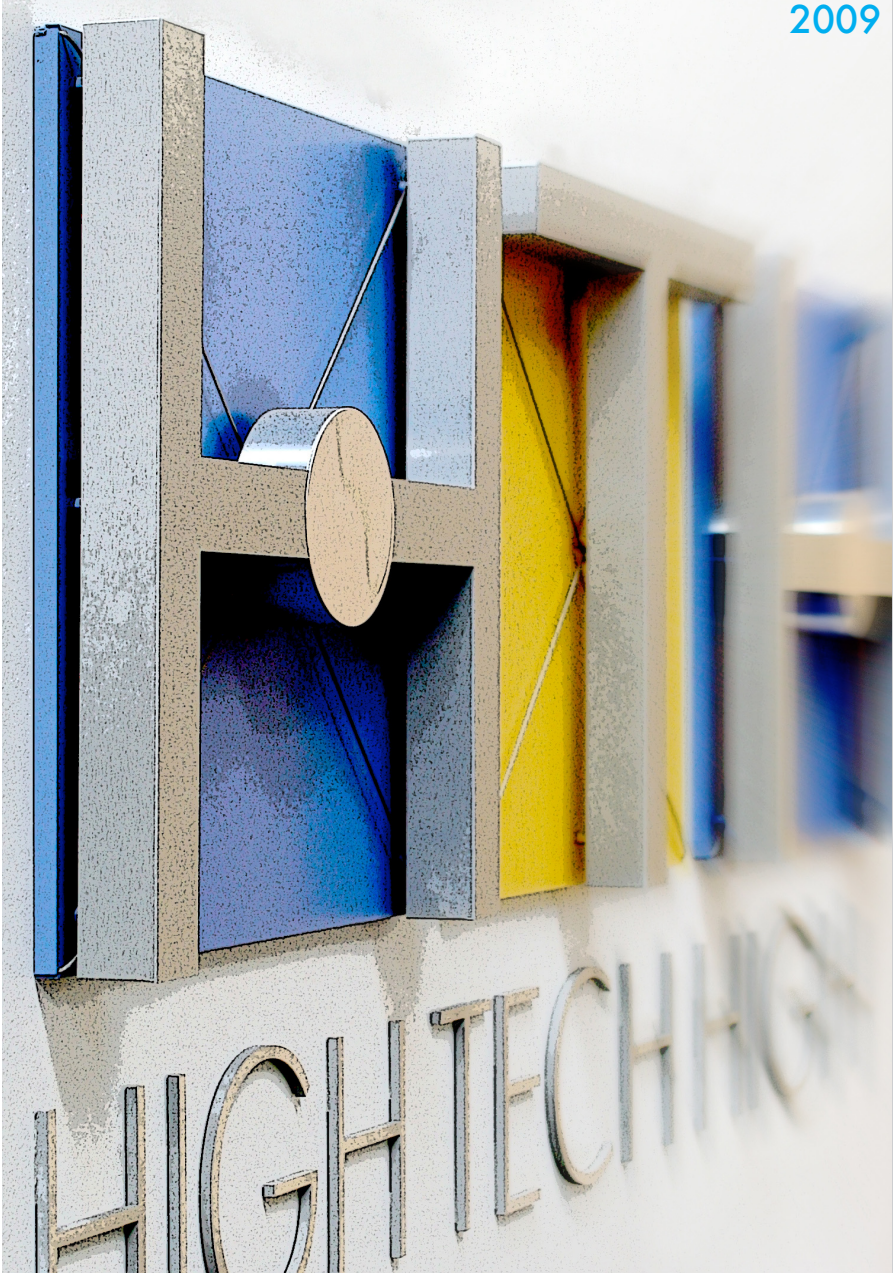


High Tech High Learning

# Summer Institute

2009



June 24 - June 26

HTH International, 2855 Farragut Road, San Diego, CA 92106

## Wednesday, June 24

	<b>Activity</b>	<b>Location</b>
<b>8:00-9:00</b>	Registration, Continental Breakfast	HTHI Commons
<b>9:00-9:30</b>	Welcome, Review Agenda, Introductions	HTHI Commons
<b>9:30-10:15</b>	Keynote address: Nikki Hinoistro, Director, High Tech High North County	HTHI Commons
<b>10:15-10:30</b>	Transition Time	
<b>10:30-Noon</b>	Workshop sessions – Round 1	HTHI Classrooms
<b>Noon-1p</b>	Lunch	HTHI Commons
<b>1-2:30</b>	Workshop sessions – Round 2	HTHI Classrooms
<b>2:30-3:00</b>	Team time	HTHI Commons
<b>3:00-3:30</b>	Town meeting, review Thursday's agenda	HTHI Commons

## Thursday, June 25

	<b>Activity</b>	<b>Location</b>
<b>8:00-9:00</b>	Continental Breakfast, Updates, Announcements	HTHI Commons
<b>9:00-10:30</b>	Workshop sessions – Round 3	HTHI Classrooms
<b>10:30-10:45</b>	Transition time	
<b>10:45-12:15</b>	Workshop sessions – Round 4	HTHI Classrooms
<b>12:15-1:15</b>	Lunch	HTHI Commons
<b>1:15-2:30</b>	Action Research Symposium	HTHI Commons
<b>2:30-3:30</b>	Job Alikes	HTHI Commons
<b>3:45-4:00</b>	Debrief, review Friday's agenda	HTHI Commons
<b>4:00-5:00</b>	Team time (optional)	HTHI Commons

---

# Friday, June 26

	<b>Activity</b>	<b>Location</b>
<b>8:30-9:00</b>	Continental Breakfast	HTHI Commons
<b>9:00-11:00</b>	Team time, planning	HTHI Commons & Classrooms
<b>11:00-Noon</b>	Group Reports and Reflections	HTHI Commons
<b>Noon-1p</b>	Evaluation, lunch and farewell	HTHI Commons

# Wednesday, June 24:

## Round One: 10:30-noon

### High Tech High 101: Origins, Design Principles, and Core Features (1A)

Rob Riordan, HTH Learning

### Personalization: Students Don't Care How Much You Know

### Until They Know How Much You Care (1B)

Michelle Clark, Humanities, HTH North County

### Technology and Reflective Practice for Educators (1C)

Brian Dixon, Director, HTH Flex

### My Legacy/My Destiny: An Integrated Project (1D)

Cady Staff, Humanities, High Tech Middle Media Arts

### Implementing "Ron Berger" Critiques in Your Classroom (1E)

Tom Fehrenbacher, Humanities, High Tech High

### The School Quality Review as a School-Level Reflection Plan (1F)

Laura McBain, Director of Policy and Research



## Round Two: 1-2:30 pm

### Project-Based Learning 101: Integrating the Curriculum Through Projects (2A)

Alfred Solis, Math/Physics, High Tech High

### The (Hu)manifest Project: Anatomy of a Humanities and Math/Chem Self-Publishing Project (2B)

Paul Lopez, Humanities, High Tech High and  
Anne Duffy, Math/Chemistry, High Tech High

### Family History (an Oral History Project) (2C)

Julio Delgado, Spanish Language and Culture, High Tech High  
HTH students

### Reading Complex Texts (2D)

Peter Jana, Humanities, High Tech High

### Computing Across the Curriculum: How to spice up learning and engage students while preparing them for the 21st century workforce (2E)

Neil McCurdy, Computer Science, High Tech High

### Schools as Sites of Adult Learning and Leadership: What, Why and How (2F)

Stacey Caillier and Rob Riordan, HTH GSE

# Thursday, June 25:

## Round Three: 9-10:30 am

### **PBL 201: Tools to Improve Your Projects (3A)**

Alfred Solis, Math/Physics, High Tech High

### **Students of Consequence Documentary:**

### **Using Science to Preserve Biodiversity in East Africa (3B)**

Jay Vavra, Biology, High Tech High

### **Backward Design and PBL (3C)**

Michelle Clark, HTH North County

Jenny Pieratt, HTH Flex

### **Alternative Assessments for Students with Learning Differences (3D)**

Sarah Barnes, Learning Specialist, High Tech Middle Media Arts

### **Using Online Tools to Increase Classroom Collaboration (3E)**

Brian Dixon, Director, HTH Flex, Marsha M. Myles, President and CEO, EdTech Specialists, LLC

### **Collegial Coaching, Coaching Corners and Team Coaching (3F)**

Tom Fehrenbacher, Humanities, High Tech High



## Round Four: 10:45 am-12:15 pm

### **Using the Internet to Manage Projects (4A)**

Don McKay, Math/Chemistry, HTH International

### **The Elephant in the Room:**

### **Dealing with Difficult Districts and Demanding Demographics (4B)**

Tom Fehrenbacher, HTH and Rob Riordan, HTH GSE

### **Classroom Climate: Creating a Team, Building a Culture (4C)**

Jaimee Rojas, Humanities, HTM North County

Joe Acker, Math/Physics, HTH North County

### **Differentiation through Projects: the One Minute Movie (4D)**

Azul Terronez, Humanities, High Tech Middle

### **The Natural Fit: Planning, Implementing and Exhibiting Middle School Projects (4E)**

Leily Abbassi, Humanities and

Ryan Gallagher, Math/Science, High Tech Middle

### **New School Start-up (4F)**

Laura McBain, Director of Policy and Research

### **Service Learning and PBL (4G)**

Jenny Pieratt, Humanities, HTH flex



## Round One: 10:30-Noon Workshop Sessions

Wednesday, June 24

### **High Tech High 101: Origins, Design Principles, and Core Features (1A)**

*Rob Riordan, HTH Learning*

Tom Vander Ark, former Education Director of the Bill & Melinda Gates Foundation, has referenced the High Tech High design principles as the basic criteria for the Foundation's giving to high school reform efforts. What are these principles? Where do they come from? What are the likely core features of a school that adopts the HTH design principles? This session offers a primer on HTH for newcomers as well as those who wish to revisit the roots of HTH. We will trace the development of High Tech High from its beginnings in the San Diego business community and the New Urban High School project, emphasizing key features and lessons learned.

### **Personalization: Students Don't Care How Much You Know Until They Know How Much You Care (1B)**

*Michelle Clark, Humanities, HTH North County*

In my four years experience with High Tech High I must say that the design principle that I've had the most success with is personalization. The ability to truly know your students affords you with the capacity to reach them in a way that they never experienced and more importantly in a way that yields successful results. This workshop will explore the significance of personalization in academic and personal growth of students at all grade levels and in all subject areas. Successful strategies, activities and resources will be delivered in an engaging way during this interactive workshop. Participants in this workshop will also walk away with an understanding of personalization's positive impact on student achievement via teacher, student and parent testimonials. Time will be allotted for questions and collegial sharing!!!

### **Technology and Reflective Practice for Educators (1C)**

*Brian Dixon, Director, HTH Flex*

This interactive workshop will introduce several technologies that help facilitate reflection as a key component of teacher development. Using examples from High Tech High and schools across the world, this workshop will inspire practitioners to expand the role of reflection in daily educational practice. Technologies introduced include YouMail, K7.net, YouTube, and Wordpress.

# Round One: [continued]

---

## **My Legacy/My Destiny: An Integrated Project (1D)**

*Cady Staff, Humanities, High Tech Middle Media Arts*

After Dan Thoene of High Tech Middle shared his “20 Years Project” with us, my math/science teaching partner and I fell in love with the idea. Ever since then, the My Legacy/ My Destiny project has been our final team Exhibition project with our 8th graders every spring before graduation. During this project, students create scrapbooks about their family legacies and their lives in the next twenty years. In humanities, they create family trees, interview family members, write vignettes about their past, present and future, create resumes and dedicate their scrapbooks. In math, they complete personal budgets, pay taxes, buy cars and houses, research their careers and invest in the stock market. At their exhibition, students role-play their future selves, sharing their legacies and destinies with their parents using their scrapbooks and artifacts from their past and future lives. The project also incorporates a college field trip and a career day at school. We present the My Legacy/ My Destiny project in the hope that others may find it useful, as Dan shared his “20 Years Project” with us four years ago.

## **Implementing “Ron Berger” Critiques in Your Classroom (1E)**

*Tom Fehrenbacher, Humanities, High Tech High*

High Tech High has been much taken with the work of master teacher Ron Berger, author of *An Ethic of Excellence*. In particular, HTH faculty have worked to adopt Mr. Berger’s approach to using multiple revision and classroom critique as a way of foster excellent—even beautiful—work. Tom Fehrenbacher, a central figure in these efforts, will describe both the approach and its application at HTH.

## **The School Quality Review as a School-Level Reflection Plan (1F)**

*Laura McBain, Director of Policy and Research*

HTH is committed to the implementation of its design principles: Personalization, Adult World Connection, Common Intellectual Mission and Teacher as Designer. To ensure this goal, the HTH schools annually reflect on their structures, programs and results using qualitative and quantitative measures. In this workshop, participants will examine the HTH School Quality Review. They will then examine their own sites’ core values and develop a school reflection plan that examines the structures and results of their sites. Administrators or school teams are encouraged to attend.



## Round Two: 1:00-2:30 Workshop Sessions

Wednesday, June 24

### **Project-Based Learning 101: Integrating the Curriculum Through Projects (2A)**

*Alfred Solis, Math/Physics, High Tech High*

Workshop participants will learn the basics of project-based learning in a hands-on project planning activity. Topics will include developing and planning a project, engaging student interests, meeting content standards, building group skills, assessment, and project presentations.

### **The (Hu)manifest Project: Anatomy of a Humanities and Math/Chem Self-Publishing Project (2B)**

*Paul Lopez, Humanities, High Tech High*

*Anne Duffy, Math/Chemistry, High Tech High*

This workshop will focus on a 10th grade project that integrated humanities and math/chem to produce beautifully rendered artifacts that were not only vehicles for self-expression, but also embedded core content throughout the duration of the project. Participants will become familiar with some of the chemistry behind making paint, as well as ways to incorporate and discuss geometry when creating an original piece of artwork. This workshop will also address various ways to self-publish poetry, essays, and artwork using the chapbook format as a model. Finally, we will consider questions associated with publication, such as how can a small publication effort impact a community? When does art become political? And lastly, what makes a quality publication?

### **Family History (an Oral History Project) (2C)**

*Julio Delgado, Spanish Language and Culture, High Tech High*

*HTH students*

In this hands-on workshop, High Tech High students will present stories based on their family histories and answer questions about their experience. The teacher will discuss how this project serves to build community and awareness in a multi-cultural classroom environment. Participants will then experience the process of writing and sharing short stories based in their own family histories. The session will conclude with reflections on what students can learn through this project, about themselves, about their peers, and about history.

### **Reading Complex Texts (2D)**

*Peter Jana, Humanities, High Tech High*

This workshop is guided by three principles: 1) No text is beyond the reach of students - with the proper pacing, structuring, and guidance. 2) There is great value in learning how to read slowly, carefully, and thoughtfully and 3) Texts are open, malleable, things, subject to interpretation and questioning. If you have ever felt limited in your text selection due to the difficulty level of certain texts or desire to expand the reading level of the texts you teach, this workshop is for you. We will discuss reading strategies, pacing, Socratic seminars, and other best practices, based on my experience teaching primary sources from Western philosophy. Participants are encouraged to share their own strategies and experiences, and to bring their thinking caps, as we will do some close reading ourselves!

## Round Two: [continued]

---

### **Computing Across the Curriculum: How to spice up learning and engage students while preparing them for the 21st century workforce (2E)**

*Neil McCurdy, Computer Science, High Tech High*

Computing (think computer programming) is creative, computing is addictive, and most importantly computing is an essential problem-solving strategy that relies on two pillars of learning: abstraction and logic. Discover how much more learning happens when your students interact with and live with a concept that you are teaching. See how static content can be made dynamic. Marvel at the individualized creative products that students deliver. Computing integrates with just about any classroom topic. In this session we will show how students can use computer modeling to enrich their understanding of sustainable farming, as they identify the essential components of their farm, decide how they will measure sustainability, determine if their model is an accurate representation of a real farm, and finally use this model to form and test a hypothesis about the real world.

### **Schools as Sites of Adult Learning and Leadership: What, Why and How (2F)**

*Stacey Caillier and Rob Riordan, HTH GSE*

Faculty from the High Tech High Graduate School of Education will describe the history and rationale for opening the nation's first graduate school within a K-12 environment. Presenters will also discuss the HTH GSE's unique approach to adult learning and mentoring within clinical K-12 settings, the design principles that guide both our K-12 schools and our graduate programs, and the importance of engaging teachers in action research projects geared toward the improvement of their practice and their schools. The conversation will be geared toward how participants can apply these elements in their own schools to encourage teacher leadership and improve teacher retention.



## Round Three: 9-10:30 am Workshop Sessions

Thursday, June 25

### **PBL 201: Tools to Improve Your Projects (3A)**

*Alfred Solis, Math/Physics, High Tech High*

Already have some experience with project-based learning? In this session, you learn to navigate through a Project Development Guide that highlights helpful tips and things to consider when planning the project. You will also see student work that exemplifies key project components.

### **Students of Consequence Documentary: Using Science to Preserve Biodiversity in East Africa (3B)**

*Jay Vavra, Biology, High Tech High*

Participants will learn about taking science outside the classroom with the adventures of Jay Vavra and a group of High Tech High students. The award-winning film “Students of Consequence” documents innovative approaches to using biotechnology to preserve biodiversity in East Africa. The African Bushmeat Expedition traveled to Tanzania to combat the African bushmeat crisis, the illegal trade of meat from protected species. Over the course of three years, students in Dr. Vavra’s biotechnology course studied the bushmeat trade and conservation forensics. They developed and practiced ways of identifying species via DNA barcoding, a technique they hope will aid scientists, environmental groups, and prosecutors in tracing illegal bushmeat back to its localized animal populations. While in Tanzania, the HTH team’s focus shifted from animals to people; they filmed and interviewed tribesmen and park officials talking about their lives and how poaching affected them. They presented their work to scientists and began an exchange of ideas for combating the crisis and developing education programs in East Africa and the United States. Hear their plans for the sequel and the Bushmeat Identification Workshop to be held this summer. (see: [www.africanbushmeat.org](http://www.africanbushmeat.org))

### **Backward Design and PBL (3C)**

*Michelle Clark, HTH North County*

*Jenny Pieratt, HTH Flex*

The workshop will take you through the project planning stages following the Backwards Design Method. We will provide an overview of the Backwards Design process and share ways to utilize the method when planning projects. This workshop will also include opportunity to use what you’ve learned. Resources will be provided and by the end of the workshop you will have planned an entire unit and/or project.

## Round Three: [continued]

### **Alternative Assessments for Students with Learning Differences (3D)**

*Sarah Barnes, Learning Specialist, High Tech Middle Media Arts*

This workshop will discuss alternative means of assessment for students with learning differences in a fully included general education environment.

Topics will include:

- Introduction to alternative assessment in special education and why these assessments are the key to inclusion in general education environments
- Examples of alternative assessments with spotlight student interviews and examples
- Handout/Discussion/Questions- a handout with resources and steps for creating non-traditional and alternative assessments for students with learning differences
- Simulation- a simulation of an easy non-traditional assessment for students with moderate to severe disabilities that can be applied to the general education setting

### **Using Online Tools to Increase Classroom Collaboration (3E)**

*Brian Dixon, Director, HTH Flex*

*Marsha M. Myles, President and CEO, EdTech Specialists, LLC*

In this hands-on workshop, we will share examples of the best online tools to help increase collaboration, peer review, and feedback on your classroom practice.

These tools can enhance the classroom-based environment and be used to facilitate online learning and hybrid/blended course delivery. This workshop will be a show and tell, so come prepared to share your experience with online collaborative technology including Google Apps, Ning, Facebook, and Skype.

### **Collegial Coaching, Coaching Corners and Team Coaching (3F)**

*Tom Fehrenbacher, Humanities, High Tech High*

Involve colleagues in improvement of their own classroom practices, curriculum development, advisory issues and more. Experience the Collegial Coaching protocol used at High Tech High to facilitate cycles of pre-observation meetings, observations, and the post-observation reflective conversations. Learn how Coaching Corners can address the “implementation dip” bringing about innovative classroom strategies. Apply a tuning protocol in which problems and steps for improvement in project-driven curriculum is addressed through Team Coaching. Practice a protocol which allows one teaching team the opportunity to use the collegial coaching process to address a driving question provided by another team. Bring your own site-specific questions and implementation issues for discussion.



## Round Four: 10:45-12:15 pm Workshop Sessions

### Using the Internet to Manage Projects (4A)

*Don McKay, Math/Chemistry, HTH International*

The Internet is changing before our eyes. Blogs, wikis, and social networks have extended the Internet with easy-to-use dynamic tools to share information and data, insights and opinions. This past year, we have used a free web site that builds web sites (wetpaint.com) as the central management vehicle for two 10th grade Chemistry projects. Our soap making project used the site to support six “companies”, each tasked with identifying a market, designing a campaign to reach that market, and manufacturing a soap product within specific budget and time constraints (www.drondonsoap.wetpaint.com). Our chemical kinetics project used the site to research, collaborate, and evaluate online tools to learn/teach the principles of chemical kinetics, culminating in a website of our own that teaches kinetics online (www.kinetics.wetpaint.com). In this seminar, you will learn how to create your own wetpaint site to facilitate the organization and management of a complex project. You will learn what works well and the pitfalls to avoid. Bring a project idea to the workshop that you would like to manage online and together we’ll draft a site of your own and get you started inputting content. While the examples above are chemistry projects, project websites can be used in any discipline and for any student that is comfortable browsing the Internet.

### The Elephant in the Room: Dealing with Difficult Districts and Demanding Demographics (4B)

*Tom Fehrenbacher, HTH and Rob Riordan, HTH GSE*

In this roundtable discussion we will discuss ways that district schools can be innovative even when their districts are not, possible solutions to seemingly intractable demands, the power of stretching definitions, applying for exemptions, enlisting community support, and developing the capacity for site-based decision making. We will also consider adaptations of the HTH principles in a range of school and district settings.

### Classroom Climate: Creating a Team, Building a Culture (4C)

*Jaimee Rojas, Humanities, HTM North County*

*Joe Acker, Math/Physics, HTH North County*

Ghandi says, “Culture of the mind must be subservient to the heart. At the High Tech High schools, we have embraced inclusion and community-building activities as critical to setting up a student-centered environment. In this interactive workshop, we will model activities that go beyond the usual icebreaker. These are strategies that you could implement in your classroom the first week to create a classroom culture where students feel celebrated, included and respected. At the end of this workshop, you will have activities planned for the first week of school that will contribute to building your class or team culture. Student perspectives on what worked with their teams will also be presented. This interactive session will include student perspectives on classroom culture.

## Round Four: [continued]

### **Differentiation through Projects: the One Minute Movie (4D)**

*Azul Terronez, Humanities, High Tech Middle*

At High Tech High we see PBL as a powerful and engaging way to differentiate instruction. But why differentiate, and how? Taking one particular seventh grade project (the One Minute Movie) as a case illustration, we will examine the purposes and practicalities of differentiation. We will then reflect on and share possible approaches for meeting the needs of diverse learners through projects in our own classrooms.

### **The Natural Fit: Planning, Implementing and Exhibiting Middle School Projects (4E)**

*Leily Abbassi, Humanities and Ryan Gallagher, Math/Science, High Tech Middle*

Come learn about integrated projects in a middle school setting. Leily Abbassi and Ryan Gallagher will discuss several of the integrated projects that they have implemented at High Tech Middle over the past two years. This include the “Oh, the Places You’ll Go” project where students budget and plan for the next 10 years of their life, the “Living Timeline” project where student recreated the last 100 years of American History, and the “Water without Boundaries” project where students turned comprehensive water reports into a room-sized model of the San Diego landscape. We will discuss implementation and planning of projects as well as finding ‘natural fits’ in the curriculum for project integration.

### **New School Start-up (4F)**

*Laura McBain, Director of Policy and Research*

Are you opening a new school? In this question and answer session, we will discuss participants’ burning questions about opening a new school or launching a new program at their site. We will address professional development, scheduling, facilities, hiring, budgeting and other topics critical to new school development. Administrators or teams are welcome to attend.

### **Service Learning and PBL (4G)**

*Jenny Pieratt, Humanities, HTH flex*

This workshop aims to move beyond community service to a more engaging and connected approach to curriculum through service learning projects. A sample HTHNC interdisciplinary service learning project funded by Americorp will be discussed in depth, from design to execution. Participants will have the opportunity to brainstorm and plan their own project following the seven step design for service learning and will walk away with resources, new project planning skills and ideas!



1:15-2:30 pm

## Special Symposium: Transforming Schooling through Teacher Action Research

*Graduate students and Teacher Researchers from the HTH Graduate School of Education and other local institutions*

What puzzles, surprises, troubles, or intrigues you in your classroom or your school? How could you better understand what is really going on? And how could you use that knowledge to improve teaching and learning? In this interactive table-talk session, participants will circulate freely from table to table to learn how educators are pursuing research questions related to their own practice and settings. The presenters will discuss their research and how the research process has influenced their thinking and practice. They will also share resources and tools. Research topics include:

- how students talk about race and ethnicity
- effects of open-ended math problems
- mixed and single-gender grouping
- learning through internships
- student voice and school culture
- strategies for making science content accessible
- ...and many more!

2:30 – 3:45 p.m.

### “Job Alikes”

These sessions offer the opportunity to meet with peers in similar roles from the other sites. Groups will discuss questions, challenges, and/or promising practices arising from their work applying High Tech High design principles, as seen from the perspective of their particular roles.

**Group and location information will be distributed on Thursday.**

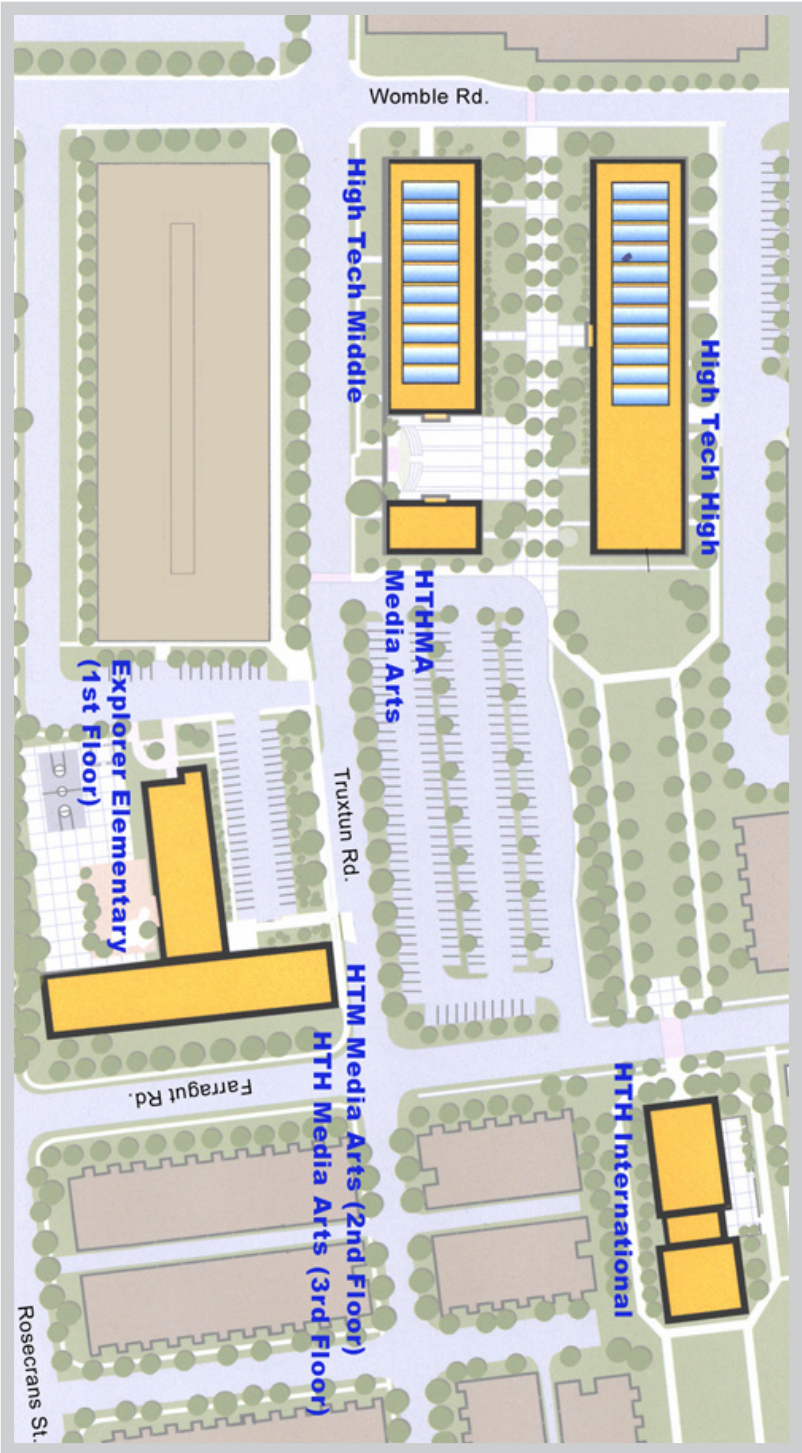


---

**Team Planning:**  
9:00-11:00 am [Locations TBA]

This session will allow teams to share and reflect on their learning from the Institute and make plans for integrating new ideas in the upcoming school year.





Womble Rd.

High Tech High

High Tech Middle

HTHMA  
Media Arts

Truxtun Rd.

HTM Media Arts (2nd Floor)

HTH Media Arts (3rd Floor)

HTH International

Explorer Elementary  
(1st Floor)

Farragut Rd.

Rosecrans St.