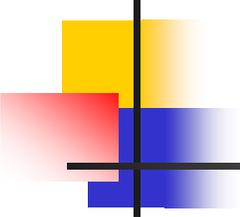


# Broadband Lessons from Napa County

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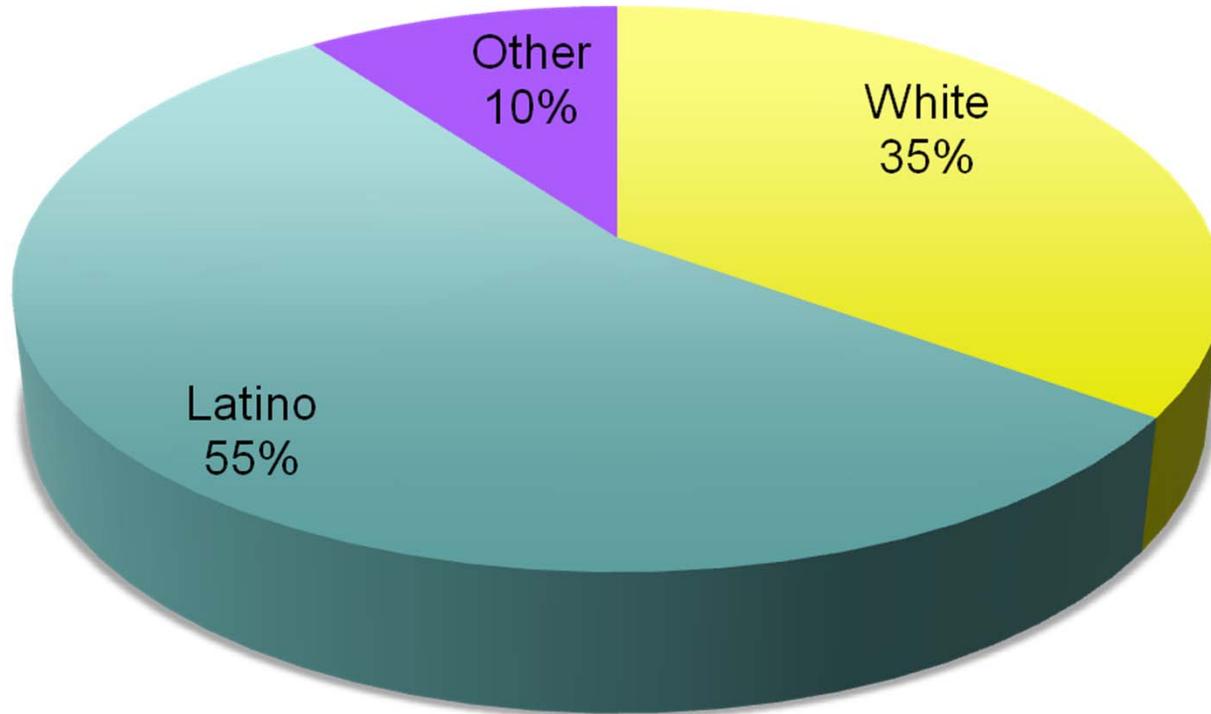
# My Assignment

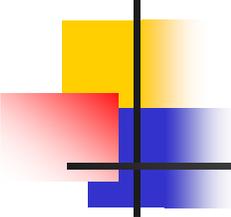
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- Provide an overview of what we are doing in Napa County
- Share a vision of the role of broadband
- Suggest what we need to do to achieve this vision

# Napa County California in Miniature

Napa County Students: ~20,000

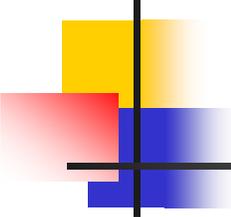




# What We Are Doing

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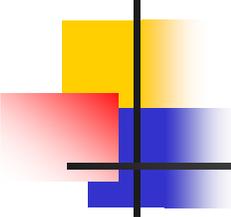
- **New Technology HS – began in 1996 as a recommendation of the Business Education Partnership**
  - Has Been Replicated 84 times Across the Country
- **Spatial Temporal Math (ST Math) – online, non-verbal**
  - 3000 students K-5
- **Digital Kindergarten Readiness**
  - 600 Pre-K, K student iPad curriculum
- **Schools with a 1:1 ratio (BYOD) include:**
  - New Technology High School, ACHS, ACMS (by 2013), River School (by 2013)
- **21<sup>st</sup> Century Masters Program at Touro University**
  - 25 Napa Teachers Enrolled
- **League of Innovative Schools**
  - Cloud Curriculum (VDI) trial
- **Teacher Support: Training and Discovery Education Streaming**
  - 45 Workshops Annually for over 400 teachers



# Vision of Broadband

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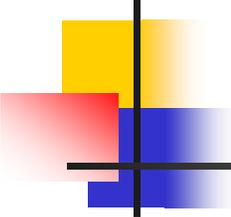
- A 1:1 student to computer ratio for all students
- Real-time, on-line assessments that provide feedback to teachers and students
- Engaging individualized digital lessons that increase educational productivity at less cost
- Project based learning focused on solving real-world, interesting problems in collaborative learning teams
- High school graduates who are fluent in life and work- related technological skills
- Achievement gap closed and increased college and career attainment



# What We Need to Achieve this Vision

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- 1:1 student-to-computer ratio for all students
- Schools networks should have the capacity to provide at least 2 MB per second of shared bandwidth per 10 students, and schools should provide a wifi network that spans the campus.
- Leadership from CDE to ensure that all schools have a plan to get there in five years and a funding model that assures revenue for online courses.
- Expansion of programs like E rate that mitigate costs to schools
- Removal of barriers to digital learning created by the Williams Act



# Addressing the Williams Act

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- The Williams Act was created in a non-digital age.
- Under the Williams Act, the primary way a school can be sure to provide equity and access for students who don't have computers and Internet access at home is to send home a traditional textbook.
- New digital materials go far beyond traditional textbooks.
- The Council and CDE should work with the ACLU to update Williams for the digital age.
- Encourage families to purchase low-cost services from Comcast, or to use libraries, after-school facilities, and public places with wifi so their students can learn online after school