SCHOOLS AND THE CITY: MAKING THE CONNECTION

FINAL REPORTS
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Lincoln High School

Galileo Academy of Science & Technology

Burton High School

Mission High School

Galileo Academy of Science and Technology

CP 290G – Community Development and Urban Education

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Executive Summary

Overview

In this paper, Mandy Eppley, Aimée Hendrigan and Apple Lo establish a framework for improved interactions between Galileo Academy of Science & Technology and the community. With the strong support of the passionate faculty, staff, administration, and students, the team defined a process by which the school can discover potential opportunities within the community and create lasting relationships that extend beyond the walls of their physical building. As they benefit from the wealth of assets in the surrounding community, members of the school should increase their awareness and pride in the exceptional skills and resources they bring to any project. Ultimately, this framework will allow Galileo to establish long-term two-way relationships in which stakeholders both learn from and teach the other, supporting both local school reform efforts and community development along the way.

This document includes original research about Galileo Academy of Science & Technology and its community including:

- ✓ Our working definition of the Galileo Community and how we arrived at it
- ✓ Review of relevant multi-disciplinary literature from Jane Jacobs to Clarence Stone, from Pablo Friere to Lawrence Suskind
- ✓ Description of our methodology including lists of interviews, accounts of presentations and analysis of data
- ✓ Information about historic and current conditions in the school and its community
- ✓ Demographic analysis using Geographic Information Systems (GIS)

This document introduces our framework for improved interactions between the school and its community:

- ➢ Recommendations – description and examples of the three-tiered process
    - Communication
    - Relationships
    - Institutions

- ➢ Strategies – suggestions for implementing each recommendation, including
  - Mentoring
  - Oral History
  - Internships
  - Weblogs
  - Tours
  - Print Media

- ➢ Social Enterprise for Learning Ideas – SeFL projects that accomplish all three recommendations
  - Website
  - Fair

Introduction

Education plays an important role in cities by preparing children to shape the future of their communities. However, despite their significance as civic institutions, many people generally perceive schools as isolated entities, separate from the community. Many students in San Francisco do not live near the school they attend. Many teachers do not work in the communities in which they live, and may only enter the neighborhood in time for the morning bells, and leave as soon as the school day ends. Neighborhood residents may have never entered the school building around the corner from their home. This disconnection can be overcome. Even without entering a school building, residents may interact with students and teachers on a city bus or in a corner store. Students and teachers may find school-to-career programs more effective if they have access to community resources. Ultimately, schools that interact with their communities may better prepare students to create the environment they envision.

The San Francisco Unified School District (SFUSD) School-to-Career Partnership is interested in learning how the community can support local education reform efforts. In order to address this issue, the director of the School-to-Career Partnership, Marigrace Cohen, developed a research project in conjunction with Professor Deborah McKoy at the University of California, Berkeley. Galileo Academy of Science and Technology is one of the four schools selected to participate. The purpose of our research is to determine how the community can support school reform efforts at Galileo.

The first part of this project profiles the historic and current conditions of the school and its surrounding community. The second part of the project unveils our strategic plan for school engagement with the community.

It was important for us to define "community" as we began our work. For our purposes we viewed community as the area surrounding the school: the Russian Hill and Marina District. To facilitate the success of this project in the short-term, it was essential to use a definition of community that included as many resources and assets as possible. The area surrounding Galileo has a wealth of businesses, organizations and community institutions we feel would provide a

myriad of opportunities for school-community connections. Additionally, the residents in the area, generally well-educated professionals, could provide additional untapped resources. Working with this local definition of community, we began our research.

Several guiding questions framed our research. What are the current dynamics and relationships between the school and the surrounding community? What are local school community assets and liabilities? How can build upon current assets? How can urban schools engage with their community to create greater connections and mutually beneficial relationships?

Each of us approached this project informed by our varied professional and educational backgrounds. Aimée Hendrigan is a second year masters student in the City and Regional Planning at the University of California, Berkeley. Her area of focus is community development. Aimee has over five years of experience working in the information technology industry. Before returning to graduate school she worked for the Santa Barbara County Administrator's office as project manager. Mandy Eppley is also a second year masters student in City and Regional Planning. Previously, she worked for an education nonprofit, which specialized in partnership development, primarily concerning school-to-work and welfare-to-work. Before returning to graduate school, she spent three years working as a software developer. Apple Lo is a second year undergraduate student majoring in the political economy of industrial societies and minoring in education. Apple graduated from George Washington High School in San Francisco. With the diverse background and experience of each member, we were able to bring different skills and perspectives to this project.

Literature Review

"The greatest truth must be recognition that in every man, in every child is the potential for greatness" - Robert Kennedy.

A wealth of literature exists surrounding the analysis of cities, and entire libraries store works detailing education. Methods of negotiation, collaboration and building sustainable partnerships fill volumes. Unfortunately, a surprising void exists in literature about ways to build relationships between schools and their communities. Our quest for information about the relationship between communities and schools integrates literature about cities with literature about schools, and our recommendations rely upon partnership development theory.

Cities

In researching the possible connections between Galileo and its community, many seminal works in city planning influenced our ideas. The literature about cities includes utopian visionaries, academic theorists, and a journalist from Greenwich, Connecticut who wrote about her personal observations. In 1898, Ebenezer Howard first published his seminal work <u>Garden Cities of Tomorrow</u>, which has been credited with laying the foundation for the tradition of modern planning. His visionary description of the "town-country magnet" entices readers with dreams of enjoying both the jobs and amenities of the city and the natural rural districts in one single location. Half a century later, in a society in which towns had further separated from country, Jane Jacobs' very readable book, <u>The Death and Life of Great American Cities,</u> details the city as she saw it. For Jacobs, the success of cities relies on their ability to unite residents into a true community: one in which people see each other regularly, care about their neighborhood, live in one place long-term, and achieve social mobility. The mobility of the residents leads to the improvement of the community. Thirty-five years later, W.J. Wilson countered many of Jacobs' observations as he described the process by which upwardly mobile residents leave neighborhoods when they attain middle-class status. Wilson's "Ghetto Related Behavior and the Structure of Opportunity" explains the importance of structural and cultural resources in neighborhoods that serve to sustain neighborhood services, pass along information about jobs, and act as positive role models for children. While Jacobs's vision of neighborhoods which

improve as their residents enjoy social mobility is appealing, Wilson's work asserts that, unfortunately, cities do not seem to work that way.

Within the field of city planning, issues of transportation and community development were important to consider in our project. In 1985, Columbia University History Professor Kenneth Jackson added to the rapidly growing body of scholarly literature about cities. His book, Crabgrass Frontier, chronicles the American trend of suburbanization in the century following Howard's utopia. This work provides an explanation of the role of transportation in creating American suburbs, and the impacts of suburbanization on the American city, many of which Jacobs observed. Ten years after Jackson's work, Robert Halpern explored the stories, myths and problems surrounding the history of neighborhood initiatives from Settlement Houses to Enterprise Zones. He describes how the neighborhood has often been selected as the centerpoint of the struggle against poverty and the basis of community development.

Schools

In addition to our research about cities, literature about education policy and theory and several guest speakers influenced our work. Economist Samuel Bowles and Herbert Gintis expressed the underlying struggle surrounding the dichotomous role of education in America in their 1976 book Schooling in Capitalist America, and the point was re-iterated by Martin Carnoy and Henry Levin in their 1985 book Schooling and Work in the Democratic State:

> "If the State in capitalist democracies is viewed as responsible for providing justice and equity to compensate for inequalities arising out of the social and economic system, education's role then is seen as improving the social position of have-not groups by making relevant knowledge and certification for participation available to them. At the same time, the capitalist State and its educational system must, by their very nature, reproduce capitalist relations of production, including the division of labor and the class relations that are part of that division" (Carnoy and Levin, 27).

Literature about difficulties, successes and opportunities in urban education assisted our work. Everyone who has read a newspaper or walked through a bookstore has heard accounts of the problems of urban schools. Many of these works overlook the potential of the schools and the people within its walls. Often the solutions offered are uninformed. We were fortunate enough to read a number of works that delve further, exploring the possibilities for success in schools.

Clarence Stone, Katheryn Doherty, Cheryl Jones and Timothy Ross marvel at the potential of urban schools to serve as links to the community through school based services, school to career initiatives and school-community projects in their 1999 article "Schools and the Disadvantaged Neighborhoods: The Community Development Challenge." Pedro Noguera asserts in "Confronting the Urban" that in many communities, " the urban public school is one of few social institutions that provide a degree of stability and social support to the individuals and families that are served" (Noguera 1). In "Public Schools that Work" Clara Hemphill identifies "the single most important characteristic of a good school is a strong principal" (Hemphill 47).

During the course of the semester, we spoke with experts throughout the field of education. Representatives of The Bay Area Coalition for Equitable Schools (BayCES), a nonprofit that works with schools, districts and community groups to improve student achievement, visited our class to discuss the potential of small schools in Oakland. A legal scholar explained to us his findings about the implications of school choice and vouchers. Marty Blank, founder of Community Schools, described the ways this movement, which is at once a set of partnerships and a common location for community services, supports and opportunities, can improve schools and communities. Finally, Jim Dyck, an architect and design specialist, came to our class to discuss the crucial elements of successful, physical, learning environments.

Partnership Development

While our immediate project objective was to find potential linkages between the school and community, we understood from the beginning that creating sustainable relationships between the parties involved was essential to the success of this project. In The Consensus Building Handbook Lawrence Suskind explains that "people who serve as members of permanent organizations, even for a short time, typically pay special attention to the long-term well-being of that entity" (Suskind xix). Roger Fisher and William Ury's book, Getting to Yes, explains how mutually beneficial results can best be achieved by considering interests instead of positions. For example, by considering only positions, a project could face obstacles about whose responsibility it is to take initiative. The schools may believe the businesses need to offer support. The businesses may feel it is the jurisdiction of the schools to reach out to them. In one instance considering the interests instead of the positions quickly allowed us to identify that one interest,

teaching students how to learn history, is perfectly aligned with another, creating a history of the community. Such a connection may never have been reached by considering only the separate positions.

In many ways, our role in this project was that of a facilitator as described by Roger Schwarz in "The Skilled Facilitator:" "to help a group improve its process for solving problems and making decisions so that it can achieve its goals and increase its overall effectiveness" (Schwarz 13). Additionally, Schwarz's work describes the need for a three-step process for problem solving. The first step is to increase the flow of information or communication. The second step is to build relationships. Once the first two steps are accomplished, the third is to create a structure to sustain them. Schwarz is not the only person to outline this process; it is fairly accepted in the field of consensus building and facilitation. We used this theory in developing our three-step model for a sustainable school-community relationship at Galileo.

Finally, in Pedagogy of the Oppressed, Pablo Friere describes the importance of true dialogue and two-way, mutually beneficial learning relationships. Friere describes that education should not, and cannot, be a one-way process by which teachers fill students with information. Instead, both parties are at once both a student and a teacher. Consistent with Frierian theory, our final recommendations encourage two-way learning relationships in which school and community learn from each other, and benefit from the services each has to offer.

Process

In addition to the literature that informed the content of our work, literature describing the role of consultants shaped our approach to the project. In 1998, Randy Stoecker's book Are Academics Irrelevant? Roles for Scholars in Participatory Research outlined the quandary of the consultant in a project such as ours. If we believe that students should play an active role in their education, how can we dictate what their Social Enterprise for Learning project entails? If the success of this project hinges on the relationships formed between the school and the neighborhood, how can we position ourselves between them? If our ultimate goal is to empower communities, how can we consult on this project without disempowering them further and becoming part of the problem? Stoecker explains difficulties such as these and offers recommendations for the ways

the consultant can offer skills and guidance in participatory research in a way which will assist the project instead of hindering it.

<u>Methodology</u>

For our research, we employed primary sources such as interviews, site visits, and community mapping, as well as secondary sources including relevant literature and internet resources.

Primary Source Research

<u>Information Technology Academy Team Meetings</u>

We visited the school site twice to meet with the principal and the IT Academy's planning team. At the first meeting, teachers, community outreach staff, the vice principal and the principal attended. This visit was an important way to get background information and set the context for our research. We learned how the team was planning for the new academy. In addition, we sought advice from teachers who were involved in the community-mapping project during the past summer. Their project served as a starting point for our research.

Throughout the course of our research, we kept in touch with the teachers in the IT Academy team so they could give us feedback on our work. We emailed them the draft of our Community Profile and received comments. Before our final presentation at the SFUSD, we visited the IT team again to deliver our presentation and receive feedback about ways we could improve our research.

<u>Community Mapping</u>

On foot and by car, we explored the school neighborhood to survey the land uses of the area and identify major businesses and organizations. This process of asset mapping and interviews with local businesses and organization was important to our project as we needed to know the resources and limitations of the community around Galileo in order to create a feasible strategic plan. The major area which we surveyed was bounded by the North Point Street, Van Ness Ave, Lombard Street, and Battery Street.

We interviewed about ten employees working in restaurants and shops while we were walking around the area. The interview subjects included employees working in the Ghirardelli shop, Crazy Shirts, Ana Mandara, La Saballa Torrea, and several others. Our interview questions

began with the businesses' impressions of Galileo. We also asked about the nature of their work and the type of clients they served. In addition, we tried to find out if there were potential partnerships between the school and the business. Their responses often gave insight into the current relationship between the school and community.

Not only did we conduct interviews while walking around Fisherman's Wharf, we also conducted phone interviews with other businesses, professional schools, and community organizations. We used the Yahoo! Search feature to identify our phone interview subjects located within one-mile of the school. We made about fifteen calls with a response rate of approximately sixty percent. The local organizations and professional schools we interviewed included: the San Francisco Massage School, San Francisco Art Institutions, North Beach Citizens, San Francisco Volunteer Center, and numerous others. All of the interviews lasted about ten to twenty minutes. The questions for the businesses and organizations that we interviewed were as follows:

- What is the nature of your business/organization and who are your major customers/clients?
- Have you heard about the Galileo Academy of Science and Technology? What is your relationship with the school, if any?
- Do you have any concerns about the school?
- We are researching ways to improve the school's relationship with its community. Do you have any suggestions about projects which the school and community could work on together?
- How does the idea of a community fair sound to you?

School Interviews

We interviewed members of the school community such as the school staff, students, and the school alumni. The goals of the interviews were to gather information about the local history and the dynamics between Galileo and the surrounding community and to determine the strengths of the school community.

We interviewed the school secretary, Bettie Grinnell, about the history of the school and local community. She has been working at Galileo for over thirty years and had written an account of the early history of Galileo. In order to learn about special programs related to student leadership and community outreach we interviewed Candice Wicks and Katie Pringle. We also talked to the school librarian Patrick Delaney about the role of the library in the advancement of technology throughout the school. Overall, we were trying to discover ways the school could use its existing resources to work with the community.

After researching school history and assets, we also interviewed the parent liaison Karen Lau and Galileo students to learn how parents are involved with the school and how they are informed about school programs and activities.

We interviewed twenty students in the course of our research. Three of them graduated from Galileo two years ago and the others were still at Galileo. We started the interviews with students whom we had personal relationships with and asked them for additional referrals. We also asked students for feedback about our community profile and strategic plan.

Questions for student/staff interviews:
- What is your impression of the school?
- How do you define "school community"?
- How do you describe the relationship between the school and community?
- Are you interested in working with the businesses, organizations, and/or government agencies to make Galileo and the neighborhood better?
- Give one suggestion on how to improve the relationship between the school and community.

The last stockholders whom we interviewed were Galileo alumni. We attended a meeting of the Galileo Alumni Association to introduce our research and see what part the group might play in building community links.

Instead of handing out surveys to our subjects, we chose to have a conversation with them on some open-ended questions. Although it was more time-consuming to conduct interviews than surveys, we were able to have developed a fairly in-depth understanding on the current relationship between stakeholders.

Presentations

In addition to seeking feedback from the teachers and students for our community profile and strategic plan, we made four presentations at different stages of our research. First, we presented our community profile to our classmates after about four weeks of research. One of the goals for the presentation was to share our initial research and receive feedback from our classmates who were working on similar projects at different schools. Another important goal of the presentation was also to set the direction for further research and possible recommendations for the strategic plan.

Secondly, as previously discussed, we presented our research before the IT Academy Development team. They gave us important feedback about what worked and what did not, what parts of our findings resonated with them, what they feel we may have missed, and the feasibility of our recommendations.

Next, we presented our work for the third time for different stakeholders in the San Francisco Unified School District boardroom on November 20th, 2003. Our purpose was to share our research-in-progress, receive feedback on the feasibility of our recommendations, and identify areas for further research.

Finally, we presented to three UC-Berkeley Professors and Marigrace Cohen. Two of the professors were critical theorists from the Graduate School of Education, and the third was the chair of the Department of City and Regional Planning. The goal of the last presentation was much the same as the previous ones: to receive feedback for our research. They challenged us with additional questions to consider:

- *What quantifiable results will you have to evaluate the success of this project?*

- *What are the long-term benefits of the interaction between schools and communities?*
- *Could we consider what assets should be in the community instead of limiting ourselves to what currently exists?*
- *Are we locking students into sub-par internships by limiting them to those within the school community? If we extend beyond the local community what are the repercussions?*

Secondary Source Research

Literature

We reviewed literature across disciplines. The course reader compiled by Professor McKoy integrated community development and urban education research. Additionally, we complemented that with outside literature in city planning, education policy and negotiation and partnership development theories.

Newspaper Articles

In order to uncover the historic and current community involvement of Galileo, we conducted newspaper research using the San Francisco Chronicle and Lexus/Nexus online. We also requested copies of the Galileo parent-teacher newsletter from the parent liaison in order to learn about the linkage between parents and schools. Additionally, we read the *Russian Hill Neighbors*, a monthly publication by a local community organization, which gave us a context of the current projects that the community were involved in.

Internet

We used a variety of internet search engines to find articles and publications about the school. We visited the websites of local businesses and organizations to learn more about their services.

The San Francisco Unified School District and Galileo Academy websites provide current student information such as academic data, demographic distribution, current curriculum, a mission statement and a history of the school. In addition, the school website includes descriptions of current projects and activities as well as news about the school. The U.S. Census

Bureau website provides demographic data and the San Francisco city website lists zoning information.

GIS

According to the United States Geographical Survey, a geographic information system (GIS) is a "computer system capable of capturing, storing, analyzing, and displaying geographically referenced information; that is, data identified according to location." The power of GIS is the ability to relate different information in a spatial context. We used GIS to explore the spatial relationships between the school and community, organizing data and information that we received from the census, school district, and various websites.

The relationship between a school and its community defines the role the local community can play in school reform efforts. Galileo Academy of Science and Technology (Galileo Academy) is a political entity, which has complex relationships with the surrounding community. In order to begin to understand these dynamics we posed several guiding questions: Who is in the community? What does the community think about Galileo? Are there existing partnerships between the school and the community? What is the history of these relationships?

In answering these questions and identifying potential community partnerships we examined the history of the school, explored the demographics of the school and its neighborhood, and interviewed community stakeholders including school staff, local businesses, social service providers, and students (all interviews are listed in Appendix A)**.**

History

> *"The main idea of the school is to present the phases of industry, trade, business, and professions in such a way that students will be assisted in making the final selection of their life work"* (*School Bulletin 1921*, from Grinnell, 2-3).

When the "ambitious, congenial, and cooperative" inaugural body of Galileo High School students entered their new school in the fall of 1921, teachers who "regarded teaching as a calling" welcomed them to a building they shared with the Red Cross. These original students came to Galileo for the same reason many still do: the other high schools were over-crowded. However, by the close of the first year, students were loyal supporters of their school, and very few requested transfers. They set a tone for Galileo that has persisted ever since (Grinnell).

Academically, Galileo has emphasized excellence in science since the day the school was named for the Italian scientist Galileo Galilei. Money raised at the original Footlights Club performances funded a scholarship awarded to college-bound Galileo students wishing to specialize in science. In 1992 Galileo's high academic standards were recognized as it was named a Distinguished School. In 1996, when the city required schools to choose a focus, Galileo High School officially renamed itself Galileo Academy of Science and Technology to

reflect its emphasis on those areas. Galileo now has two science pathways: Environmental Sciences and Health Sciences. In 2002 the school decided to add an Information Technologies Academy and was rewired as a "Digital High School." The school has a comprehensive and sophisticated computer lab and a wealth of technological resources for students and teachers. The 2003-2004 school year is the planning year for the IT Academy, and implementation will begin in the fall of 2004. Additionally, the school is exploring the possibility of adding a Biotechnology focus through either a Pathway or an Academy, and is hoping to collaborate with the University of California at Berkeley on the project.

From the beginning, Galileo High School students have taken an interest in their community. During its first semester as a school in 1921, Galileo response was first and their contribution was largest to the Associated Charities' request for contributions for a fund for babies' clothing. In the late 1920s Galileo reached out to other city high schools, junior colleges and even the United States Army by opening their doors to those groups in need of space. During World War II Galileo students worked with the Red Cross. In the early years Galileo also provided entertainment to the community. The Footlights Club demonstrated the musical and dramatic talents of the students by offering performances ranging from a minstrel chorus to a Chinese tragedy. Galileo students still perform for their community. On October 18, 2003 they held a Vaudeville show on campus (Grinnell).

However, relations between the community and the school have been strained at times. In 1998 Galileo responded to neighborhood complaints of students' littering and loitering by closing the campus. Currently only eligible seniors and second semester juniors are permitted to leave campus during the day. Many school personnel we interviewed explained that Ghiradelli Square re-oriented its entrance to limit student accessibility. In this way, the community prevented students from entering as the school prohibited them from leaving. Galileo's campus faces inward toward a student quad. The fact that students cannot venture into the community, and community members cannot see the students inside adds a physical obstacle for school-community relations.

Demographics

Bettie Grinnell, the school secretary, explained that the demographics of the school have diverged from that of the neighborhood during the thirty-one years she has worked at Galileo. The school population now includes more Latino and Vietnamese children and fewer white children than it once did. According to Grinnell, the school used to reflect the ethnic composition of the neighborhood better than it does today, but the white children from the surrounding areas now go to private schools. The IT Academy group supported this observation by hypothesizing that the children from the neighborhood around the school attend private schools. In fact, 44% of the children in Galileo's neighborhood attend private schools while only 26% citywide do so. It is also noteworthy that there are few children living immediately around the school. Fewer than five percent (5%) of households in the census tract containing Galileo Academy have children under the age of 18 while almost 20% of San Francisco households citywide have children. In Galileo's census tract of 4,288 people, only 18 children are enrolled in high school and are split equally between public and private schools. See Appendix B for the distribution of school-aged children in San Francisco (United States Census, 2000).

Galileo Academy of Science and Technology
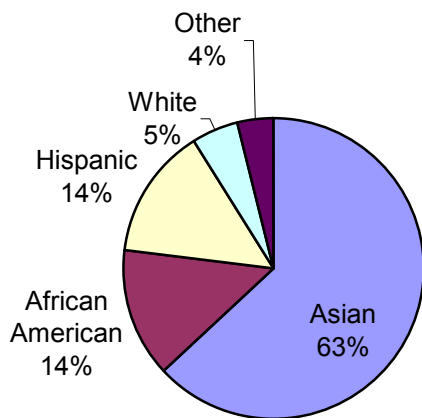
Source: San Francisco Unified School District 2002

Galileo's Neighborhood
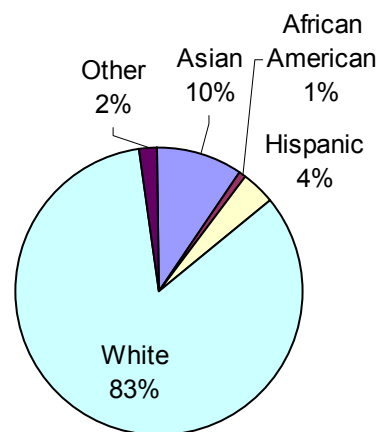
Source: Census Data 2000, San Francisco County, Tract 102

The families surrounding Galileo are whiter and less diverse than the rest of San Francisco. Galileo's neighborhood is 87% white, compared with 50% citywide and 5% of the high school students. About two-thirds of the children living near Galileo are white, compared with about one-third citywide. Meanwhile, 63% of Galileo students are Asian compared with less than 10% of the neighborhood population. See Appendix C for distribution of the Asian population citywide (United States Census, 2000). The charts below demonstrate the different ethnic distribution between the school and its neighborhood.
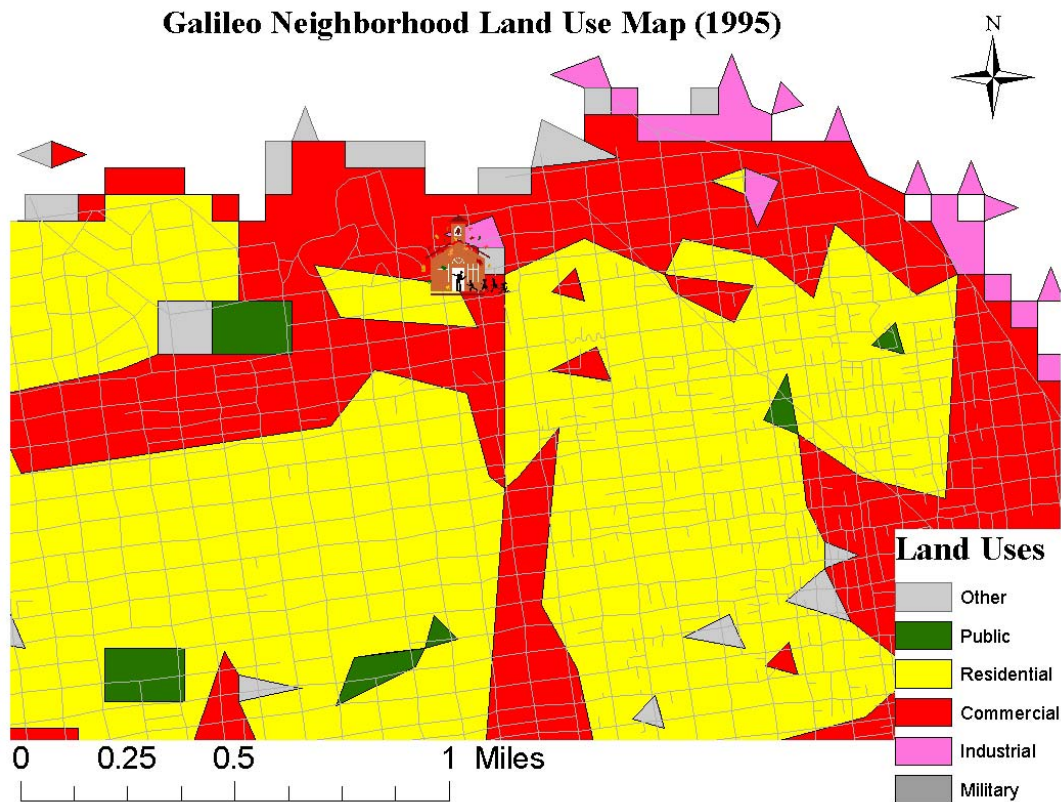
The mixed-use residential and commercial neighborhood surrounding Galileo Academy could offer significant human capital and a range of professional opportunities to the students. Almost every adult (97%) living near Galileo has graduated from high school, and 29% have post-graduate degrees. These numbers are significantly larger than those city-wide (81% high school graduate, 16% post-graduate degrees). Sixty percent (60%) of the employed population in the Galileo neighborhood work in the Information, Finance or Professional sectors, compared with 36% citywide. The median family income of the surrounding area in 1999 was $130,098, more than twice as much as the San Francisco average of $63,545.

The area is a blend of primarily residential and commercial uses (see Map 1). In addition to the 4,288 residents, the neighborhood contains 1,529 businesses, about 40% of which are services, 30% are finance, insurance or real estate related, and 20% retail (U.S. Census 2000, SF Prospector).

School Assets

We were able to speak with the school principal, the school outreach coordinator, several teachers, the school librarian, the school secretary, and an instructor from a local nonprofit who teaches classes at Galileo in addition to students, the parent liaison and the Alumni Association. Everyone expressed enthusiasm and willingness to help us with our project. After each meeting we left with a list of recommended contacts. Galileo's strong, supportive environment promises to be a powerful resource as we develop our plan.

MAP 1. GALILEO LAND USE

Galileo Neighborhood Land Use Map (1995)

Land Uses

Other
Public
Residential
Commercial
Industrial
Military

0   0.25   0.5   1   Miles

Principal

As was noted in our literature review, Hemphill describes strong leadership as the single most important factor in the success of a school, and in our experience we found Galileo's Principal, Margaret Chiu, to be a strong leader. Principal Chiu is proud of Galileo's increasingly strong reputation. This year the school was a popular choice and was overenrolled. As she took us on a tour of the school she interacted with many students we passed. From science lab stations to computer terminals to photography darkrooms, she showed us many of the wonderful facilities of the school and explained how the teachers and students were utilizing them. Principal Chiu also outlined Galileo's connections with universities for us, and expressed interest in building new relationships. Finally, Principal Chiu attended our presentation and provided insightful comments and recommendations for progressing toward our final product.

Community Outreach

Our school is fortunate to have Katie Pringle, the outreach coordinator who is a direct contact for us. Ms. Pringle is involved with the IT Academy that is currently in the midst of planning for the

Academy's opening in 2004. She is very interested in our project, particularly in finding ways the community can be involved with the Academy, possibly providing resources such as internships and summer jobs.

Teachers

The teachers with whom we spoke were also interested in connecting the school with the community. In our meetings, teachers observed that many residents in the community have never been inside the school. One told a story of how a woman who runs by the school stopped her once and exclaimed, "I run by this building everyday and didn't realize that it was a school!" There is a general concern that this disconnection between school and community creates a "dehumanization of youth." Mr. Machtay, the math and computer sciences teacher, suggested that the students could do a community-based social enterprise project that would culminate in a community fair at the school. This would be an active way to bring the community into the school, demonstrating the school's capacity and sparking ideas about how local residents could become more involved in the school. Mr. Machtay strongly suggested we contact the Russian Hill Neighbors, the local neighborhood association as we progress in our research.

Librarian

The school librarian, Mr. Delaney, is an expert in web blogging and has established a school club School Library Advisory Committee (SLACers) as well as the blogRATs. These groups run the school's blog site (www.galileoweb.org) and have strong skills in web programming. Recently, Mr. Delaney attended Harvard University's first Bloggers Conference. During a panel that featured the webmasters for five of the Democratic presidential candidates, Mr. Delaney connected students at Galileo by Instant Messenger and encouraged them to watch the live webcast of the panel event. The schools website notes:

> "When time came for audience questions, Mr. Delaney had a chance to say, 'This question comes from Jean Lee, editor of the Pendulum newspaper at Galileo High School in San Francisco, who is currently watching the webcast of this panel.'

> The audience burst into applause even before the question was asked. The conferees were at Harvard to talk about the use of technology and the power of communication. The line of communication from the Galileo students to the Harvard auditorium showed the conference what it was all about!"

Starting in the 2003-2004 academic year, staff at Galileo Academy are gradually implementing blog use. They run their sites under the auspices of their partners, the University of California's Bay Area Writing Project and the Office of the Kern County Superintendent of Schools. Teacher and student use of blogs for academic work is increasing. Poised to be in a leader in weblogging technology among high schools in San Francisco, if not the state and country, Galileo recently hosted a conference for weblog using educators from around the country. The technological skills of the student and teachers will be a strong resource for reaching out into the community. There are opportunities for linkages between the IT Academy and the SLACers and blogRATS to develop websites and blogs for local businesses and community organizations.

Secretary

The school secretary, Mrs. Grinnell, has worked at Galileo for 31 years. She was extremely helpful in giving us a perspective on the history of community, in fact, she compiled a compelling account of educational and social aspects of the early years at Galileo Academy. She seems to be the "unofficial" school link to the community. In addition to attending Rotary Club meetings and serving as the main contact for the Galileo Alumni Association, it is Mrs. Grinnell who responds to concerns of Galileo's neighbors about excess noise, students littering, or which lights have burned out after being left on overnight. She mentioned that the Alumni Association has traditionally not been very directly involved in school activities. Many alumni no longer live in the neighboring community. However, the Association is active, and is a promising resource for funding and support.

REAL

Instructors from a local community organization - Revitalizing Education and Learning (REAL) – work with nine Galileo teachers once a week throughout the year, teaching youth empowerment through service learning projects. The goal is to build community among the diverse student body, while teaching students how to take collective action on a project of their choice. We spoke with Candice Wicks, one of the instructors from REAL who described the three stages of the course as: building community, building power, and taking action. The students work together through most of the year, developing cultural awareness and learning about means of power in society. In the spring they choose a project they want to take action on,

based on their own research and surveys of other students. Building stronger links to the community would be beneficial for the REAL student projects.

Ms. Wicks also mentioned a mandatory leadership class made up of the elected members of the Associated Student Body (ASB). They meet once a week and have recently selected topics for projects that they will be working on this semester. The topics for this semester are: violence, peer pressure, cultural participation, and sanitation. These projects could be instrumental in forging stronger links to the community while providing educational benefits to the students.

Students

Galileo students came from different parts of the city or outside of the city. According to one of the teachers, the traveling time for students to the school ranges from half an hour to two hours. This poses additional challenges for community involvement, both in engaging residents and having students stay around campus after school rather than returning to their home neighborhoods. Both the recent Galileo Academy graduates and current students we interviewed said that they did not know much about the surrounding community. They typically identified the community as "Fisherman's Wharf" and "neighbors who didn't pay too much attention to the school." While the school staff told us that the school has strong partnerships with many organizations and education institutions, the students we spoke with did not seem to know about these learning opportunities. One of the popular resources they used was the Marina Library, which is about a ten minute walk from the school. Juniors and seniors used the AACE Talent Search Service, an organization which provides students with college information, tours and fee-waivers for standardized testing. In general, no students we spoke with knew about the IT Academy curriculum or how they could learn more about it. This may be changing as outreach to students is increasing. Currently the homepage of the school website features a section on the IT Academy.

Parents

We spoke to most staff about parent involvement at Galileo. The consensus is that parental involvement is increasing. This year there were 300 people at the incoming freshman back-to-school parent night, compared to 100 the year before, and 25 the year before that. Many staff

noted that often parents work at night or must travel quite far to come to Galileo, limiting their ability to be very active in school activities. However, the demographics of the students are changing. More students are coming from the Sunset and those parents are traditionally more involved in the school. Staff mentioned that there was a parent-teacher night on October 28.th This event traditionally has high attendance as report cards are distributed. Unfortunately, there is currently no active PTA (Parent-Teacher Association) at Galileo. Each time we inquired about this fact, the response was that this is probably due to the distance between students' homes and school. Galileo attempts to reach parents through a Parent Liaison, Karen Lau. Lau organizes periodic newsletters in Chinese, Spanish and English to keep parents informed of events at the school. While this newsletter is a way for parents to hear about school information, Galileo still does not have a real mechanism for two-way parent involvement in their children's education.

Alumni

Galileo has an active alumni association. Primarily comprised of graduates from the 1950s, the alumni hold regular meetings, organize social events and maintain a website. Despite the fact that the current incarnation of Galileo barely resembles the school they attended, they are interested in being more closely connected with the school. Bettie Grinnell mentioned having spoken with them on numerous occasions, and regretted the lack of structure for a connection with the group. The Alumni Association enthusiastically invited us to a meeting, and was very interested in our project and findings. They could be a wonderful resource for students compiling an oral history project about the school and community.

University Partnerships

As mentioned earlier, Principal Chiu listed some of the numerous university partnerships Galileo currently enjoys, and expressed interest in starting new ones. Principal Chiu is very interested in increasing Galileo's community partnerships, particularly with local higher educational institutions. As noted previously, Principal Chiu would like to explore additional collaborative projects at UC-Berkeley, particularly through the biotechnology pathway. Currently, partnerships exist with UC-Berkeley, City College, Cal Pacific Medical Center, the University of San Francisco, Dominican College and San Francisco State. These partnerships range from teaching a medical terminology course to student teaching programs.

Environmental Issues

One of the most developed university partnerships at Galileo led to the creation of the Environmental Sciences Pathway. The school's Environmental Sciences Pathway was started as a project with UC-Berkeley's Interactive University, which supported the Urban Watershed Project. In conjunction with UC-Berkeley's Environmental Sciences and Ethnic Studies Departments, Galileo students meet once a week in the Presidio. This work, which has both field and web components, teach students to identify plants, create maps, understand habitat, assess water quality and assist in ecosystem restoration projects.

Local Businesses

Businesses are important stakeholders in the school because they are potential donors and can provide student employment and internship opportunities. As Galileo Academy is located near Fisherman's Wharf, we interviewed some restaurants and shop owners/workers as we were on our walking tour. Predictably, most of the tourist businesses perceived students as their potential customers and employees. They were friendly to us during the interview and seemed surprised that the school was willing to consider involving them in some ways. The businesses' impressions of the school vary. Most of them know about the location of the school but they see it as an entity isolated from the tourist areas. Some business employees dislike the students' presence because they take the same crowded buses to work or compete for parking spaces with the students. Fundraising was the one potential project most shops considered in connection with the school. Some shopkeepers suggested that students could purchase products from them wholesale and sell it to other students in fund-raising events. This type of cooperation creates mutual benefits to both parties because the products are advertised in the school and the students can raise money.

Besides local restaurants and shops, we also conducted phone interviews with some private professional schools, law firms and other retail companies. We tried to contact about 10 companies but we were only successful in talking to five of them. Many who we reached would hang up or quickly show disinterest when we explained our project. The common response to our calls was confusion or surprise. Even businesses, which were interested in partnering with the

school, were skeptical about the idea of joint projects. For instance, Safe Sense, a nearby condom retailer, noted that the company would be interested in offering safe sex education and providing internship positions to students. However, staff did not know how to approach the school and wondered whether the students would be interested in working for a condom company. Accessibility and communication were common themes in our interviews as businesses and community organizations do not know how to make connections with the school. As a result, the schools lose opportunities for support and partnerships.

Community Organizations and Social Service Providers
Social service providers are important stakeholders for the school as they support the schools by providing free services such as tutoring and after-school programs. Community organizations were friendlier during our interviews and showed interested in providing educational resources and internships to students. However, since they are nonprofit organizations with limited funding, they stated very clearly that internship positions would be unpaid even before we asked about if the student interns would receive a stipend. Most of the interviewees saw benefits in partnerships with the school. Many noted that student involvement could draw community attention to their mission and work.

The Volunteer Center of San Francisco was the first organization we interviewed. Within a mile of the school, it is a private organization established in 1946 to provide the city with a centralized source of volunteer information. The mission of the organization is to "act as a catalyst for ensuring that every person has the opportunity to be a powerful, contributing community member." The program coordinator told us that Galileo students volunteered in the Center before during its open house. She also told us that the Center had internship positions for data entry and program assistants. Moreover, she encouraged the students to come to the Volunteer Center to learn about nonprofits that needed help.

Despite most of the social service providers' positive reactions to student involvement, they expressed concerns about possible obstacles. For instance, a representative from North Beach Citizen said that it might be "too real" for students to serve in a homeless organization. Since the organization has never had student volunteers, she was concerned about the student volunteers'

ages and skill levels. She noted that serving the homeless population in the city has some risk as clients could be violent and drunk or using drugs. The Lindamood Bell Learning Processes, which serves students with learning disabilities, was concerned about the issue of privacy for their clients if students volunteered in the clinic. Many of the organizations we interviewed rarely did outreach into the community. As a result, the school and students were not able to benefit from the local organizations because they did not know how to contact them.

Russian Hill Neighbors

A nonprofit organization established in 1981, Russian Hill Neighbors' (RHN) mission is to "encourage friendly association among Russian Hill neighbors and merchants and to respond to neighborhood concerns" (RHN website). They organize events, maintain a website and distribute information. Interestingly, the RHN has a history committee, charged with creating an oral history of the community. They are currently seeking assistance on the project. This is a potential opportunity for collaboration between the school and the neighbors.

Strategic Plan Recommendations and Strategies

Through our research we targeted three areas of recommendations with corresponding strategies for the Galileo community. Our general recommendations for creating strong and lasting school and community partnerships are:

1) **Enhance Communications**
2) **Build Relationships**
3) **Establish Institutions**

First we will describe the recommendations, as they build on each other and are most easily and effectively implemented in order. Next we will outline specific strategies that the Galileo IT Academy can use to begin to build stronger partnerships with communities outside of the school.

While we will outline specific strategies for realizing these recommendations for the Galileo IT Academy, we feel that many of these ideas would be useful and applicable for all of the academies. In fact, the basic principles could be implemented by an entire school, or even by one classroom or a school club.

Enhance Communication

Any partnership process needs to begin by building a foundation for understanding and communication between the school and community. While there is a wealth of resources in the neighborhood surrounding Galileo, many businesses and nonprofits did not know how to get access to the school to offer resources such as jobs, internships and expertise to students and teachers. Teachers and students do not have the information necessary to reach out for those local resources. Meanwhile, the school could provide many skills and resources to the community, but the lack of communication has created an obstacle to a potentially mutually beneficial arrangement. This recommendation simply acknowledges that all actors in the process have a lot to offer, and need to know what is available. We recommend that the school take the lead in communicating to the surrounding community.

Build Relationships

Once a communication model is developed, we recommend that schools and community partners work to develop relationships that enable mutual learning. The IT Academy students will have

technology skills they can offer to members of the community, and the community members have expertise that they can share with the students. Developing strong relationships between the school and community will enable a process in which both groups understand what each has to offer, and each person and group involved is at once both student and teacher. While enhancing communications as described above is primarily a one-way system of conveying information, this recommendation emphasizes the development of interactive, two-way relationships between the school community and the larger surrounding community.

Create Institutions

The third tier of our recommendations involves establishing formal, accepted structures that can maintain these learning relationships as partners change over time. Institutionalizing these relationships will allow the work accomplished through this project to endure beyond the involvement of specific individuals. As the processes and relationships become established and accepted, networks can grow, providing opportunities and ideas for new projects further linking the school and community.

Recommendations in Action: An Oral History Project

How could these recommendations work in practice? Through our research we identified an oral history project that might offer opportunities for students and teachers to work directly with two different groups of community members. The Russian Hill Neighbors (RHN) neighborhood association wants to develop an oral history project about Russian Hill. This could be an interesting project for a Galileo class to take on in partnership with the RHN. Additionally, the Galileo Alumni Association expressed interest in being interviewed for a project about the neighborhood.

The first tier of our recommendations, improving communications, requires each group knows about the other's skills, resources and goals. The class or teacher could begin this process, enhancing communications by doing initial internet research and outreach. In this example, the school provides time and computers and technology resources, with the goal of teaching the students new ways to learn history. The RHN adds interested, educated, professional members' expertise and mentorship and the goal of producing an oral history of the neighborhood. The

Alumni Association could offer first-hand knowledge of the history, while meeting the goal of being more involved in the school. By understanding the resources and goals of RHN and the Alumni Association, and informing them about what the school can provide, the school will facilitate the communication process.

Using the principles of the second recommendation - "building relationships"- the groups develop connections by working together on the project using the different skills and resources of each group to improve the overall results. The students, teachers, residents and alumni involved in this project will become more familiar with each other during the course of their work together. As they work together toward their final product, they will begin to build relationships that can extend beyond the scope of this project. These relationships can add personal connections to the previously isolated groups. If a resident sees a student eating breakfast on their doorstep before school, they may realize that the students they know are interested, intelligent and respectful, and thus be more accepting of this new student. If a student sees an older individual on a bus, perhaps their familiarity with the older alumni will increase the respect they have for their elders. Through these new relationships, alumni can move beyond the one point of contact that they currently have to Galileo, increasing their opportunities for connections with both the school and the community. Building personal relationships in this way could begin to break down the walls between the different stakeholders in the process; to replace the fear each has of the unknown with genuine respect.

Finally, a project website could serve to facilitate the process of creating an institution. This website could include basic contact information, photos of the "Oral History Team" working together, student journals of the process, and the final product. By providing a window into the process of the project, others will have access to information about each group's contacts, skills, resources and goals. This will allow people not personally involved in the project to gain insight about the relationships formed during the process. The website could help to ensure that when students graduate, teachers move on, and members of the Russian Hill Neighbors and the Alumni Association change, the next group of partners can build upon links and resources that have been established.

Strategies to Enhance Communication

This most basic way to enhance communications between the school and the surrounding community is to distribute information about local programs and resources. At Galileo, the students in the IT academy could build a website focusing on community resources and potential opportunities for school linkages. This website would be an extension of the school's current website, but with a broader focus as a resource for the entire community. Weblogging provides an ideal mechanism for feedback from all users.

More traditional means of print outreach should also be utilized. Galileo's monthly parent newsletter (which is printed in Spanish and Chinese) is an easy vehicle for informing parents about activities and projects in the community. The school can reach out to parents through the newsletter and at Back-to-School parent nights. The schools might create a quick parent survey to determine what types of resources parents can offer the schools, whether through jobs, internships or possibly special workshops parents could give. Once parents get a sense of how community connections are being formed, they may more easily be able to envision different ways that they can become involved in their child's education.

Local Chinese and Spanish language newspapers are also mediums that can be utilized to publicize information for community members who do not use the internet or who speak different languages.

As students' knowledge about the community grows, students can take the lead in making community connections. One fun way to do this would be to have students give neighborhood tours to classmates, local residents and tourists.

Strategies to Build Relationships

Building relationships between the school and community will be an ongoing process that will take work and persistence. In order to have the students learn more about the surrounding community, a class might complete a community-mapping project. Through community mapping students and teachers walk around the neighborhood, identifying local assets. These assets could include businesses, social services, museums, government agencies and community

organizations. A community-mapping project could help students and teachers develop an understanding of the current perspectives of the neighborhood. In addition to encouraging connections with their surrounding community, the students would also identify potential partners for other projects.

Students could build upon their new knowledge of current neighborhood conditions with the local history project mentioned earlier. In this project, students would create relationships with the Russian Hill Neighbors and the Alumni Association while learning about the history of their school community.

A mentorship program could match students with alumni or other school volunteers to learn more about potential careers. Students could be matched by interest, and mentors would provide real-life perspectives about their careers. Mentors might provide externships, or "job shadowing" opportunities. The mentor program is also a potential opportunity to keep alumni who no longer live in the neighborhood connected to the school.

As their expertise builds, students can provide computer services to local business and residents. They might build websites for local businesses. In return, these businesses might provide job shadowing or internship opportunities. Students might also provide instruction to local residents who would like to learn how to use their computer or build a website. These mini-courses could be offered on school grounds or possible through the local library branch.

Strategies for Building Institutions

The third level of our recommendation is to create institutions in school to maintain the established school-community relationships. We feel that it is critical that students lead this effort and recommend that the institutions we suggest be developed as Social Enterprise for Learning (SEfL) projects. The students should play key roles, designing, creating and maintaining the institutional structures.

Galileo Community Website

A Galileo community website would be an easy to implement, effective and meaningful institutional structure for the IT Academy. This community-focused website would extend Galileo's already strong web presence to provide information about school and community programs, projects and resources. Galileo's established weblogging practice would be a particularly useful mechanism for receiving community feedback and facilitating dialogue.

The website would give the students experience in website design, development and maintenance. The students would begin by designing the website. The design process should be an exercise teaching the students about collaboration as well as software design. They would select a design team, which would begin by drafting a functional design document to explain the contents of the website in plain English. The document would circulate to partners for suggestions. Next they would construct a technical design document detailing the web design process, again circulating the document for comments. When the design process is complete, the could proceed to the development stage.

The development and implementation of the site will give students experience with computer programming and the process of "making a page live." Additionally, the development process should include a testing phase in which the students ensure that their website works as designed.

Finally, the students will develop a plan for website maintenance. If something on the site breaks, how is it fixed? If a new component is desired, who adds it? Since different students will be involved each year, part of good maintenance may be detailed documentation. .

School-Community Fair

Another powerful institution to foster communication and maintain relationships would be an annual school-community fair. Teachers at Galileo suggested this idea at our first meeting. The creation of the new IT Academy at Galileo could be an exciting opportunity to introduce the community to the school. A community fair surrounding the opening of the academy could be a kickoff event to a continuing relationship and dialogue with the surrounding community. The event could be an opportunity for students and school staff to demonstrate what students have

learned and contributed to the community. At the same time it is a chance to ask the community for job, mentoring and internship opportunities.

The fair would also be a SEfL project led by students. Students can take major roles organizing, coordinating and marketing the fair. Students could do research on grant opportunities to help fund the fair. There could also be several opportunities for business sponsorships. Some programs that could be featured at the fair include:

- Mentorship program introduction and sign-up
- Oral history demonstration
- IT Academy information booth – introduce this unique program to the public or perspective students
- UC-Berkeley Interactive University program information
- Community services information
- Internship opportunities
- Campus and community tour

Conclusion

"*We are now at a point where we must educate our children in what no one knew yesterday, and prepare our schools for what no one knows yet.*" —Dr. Margaret Mead

This quote appears on the Galileo school website and succinctly captures the challenges facing educators in a rapidly changing world. Galileo is poised to meet many of the challenges of educating students for the future with their strong focus on technology and scientific achievement. How can the community support these school efforts? Our research attempts to illustrate ways that the community can become involved in the process of helping students to become, not simply the next generation of employees, but rather active participants in their communities, engaged and empowered to make the changes they envision.

Several guiding questions formed the basis of our research:

What are the current dynamics and relationships between the school and the surrounding community?

For this project we defined the school's "community" fairly narrowly, as the surrounding community. However, it became clear through our conversations with stakeholders that community is a fluid concept. School staff typically spoke of the community of Galileo Academy or the community of residents around the school, businesses defined "community" as their customers; nonprofit organizations defined "community" as their clients and volunteers, students most often spoke of the community where they lived. These different ideas about community demonstrate the separations that exist between the different groups. This general separation of spheres is primarily a result of the natural "business-as-usual" behavior of these groups. The school has not traditionally worked directly with the community and vice versa. Collaboration and partnering are not spontaneous activities. Working together effectively involves dialoguing, planning and a broad vision of what can be accomplished. While the current community dynamics do not create an environment that makes working together a simple proposition, we believe that our recommendations and strategies give the partners some tools to begin to develop mutually beneficial relationships.

What are local school community assets and liabilities?

Galileo is an exceptional high school, with a dedicated staff, ambitious students and powerful technological resources. The surrounding community offers a vast array of opportunities for educational connections to develop, through jobs, internships, mentorships and unique project-based learning initiatives. However, Galileo, like many schools, remains an island unto itself. Adding to this isolation, the school's closed campus policy not only keeps students in the school, it also serves to keep others out. It became clear the that in order to benefit from the resources in the community, the school will have to reach out, both outlining what it wants from the community and describing what it can offer in return.

How can urban schools engage with their community to create greater connections and mutually beneficial relationships?

Our recommendations create a basic framework for cooperation and mutual learning that are not specific to Galileo's IT Academy, but could be used by any school looking to create opportunities for community collaboration.

Through our research and review of relevant multi-disciplinary literature we developed a three step process that can guide partnership process.

1) **Enhance Communications** – Build a foundation for understanding by sharing information and learning about each partner's skills, resources and goals.
2) **Build Relationships** – Develop connections by working together, combining skills and resources and establishing interactive, two-way relationships.
3) **Establish Institutions** – Establish formal, accepted structures that can sustain these learning relationships as partners change over time.

As the school takes the lead in these efforts, we recommend that students be involved at all levels, developing SEfL projects.

This emphasis on student choice and agency stems from the many discussions our group had about our roles as researchers in this project. Throughout the project we repeatedly returned to these questions:

If we believe that students should play an active role in their education, how can we dictate what their Social Enterprise for Learning project entails?

We wanted the students to be active participants, engaged in developing the processes and goals of working with the community. Our recommendations are ideas to be built on, not blueprints for action.

If the success of this project hinges on the relationships formed between the school and the neighborhood, how can we position ourselves between them?

It was a constant challenge for us to determine the nature of our role in this project: should we be active participants in the process or act as neutral observers? How much should we do for the school? How much should we leave for them to choose to act on? Our solution was to create a framework for action for the schools, rather than a detailed plan. If we had planned and organized an entire project, we would have placed ourselves squarely in the midst of it, the success of the project dependent on our choices. Instead we offered choices to the schools.

If our ultimate goal is to empower communities, how can we consult on this project without disempowering them further and becoming part of the problem?

If we hold all of the information, we hold the power. We avoided this by having open lines of communication at all times between school staff and SFUSD staff and ourselves. We had in-depth interviews with a multitude of stakeholders and asked each one to recommend others to whom we should speak. We sent drafts of our project to all parties and made multiple presentations, asking for and integrating feedback at all points. While no research project is free of bias, we tried to listen to community needs, consider multiple viewpoints and provide suggestions and ideas that could be practically implemented.

Looking to the Future

We look forward to the success of the IT Academy at Galileo. We feel that engaging with the community more directly can only enhance the academic experience for the students in the Academy and throughout the school. We believe that working with school partners, the community *can* support local education reform efforts while making a meaningful impact on educational outcomes for students.

SOURCES

Bowles, Samuel and Herbert Gintis. (1976). <u>Schooling in Capitalist America</u>. London: Routledge.

Carnoy, Martin and Henry Levin. (1985). <u>Schooling and Work in the Democratic State</u>. Stanford, CA: Stanford University Press.

City and County of San Francisco, Mayor's Department of Business and Economic Development. (2003). <u>SFProspector</u>. http://gisbpub.sfgov.org/website/sfprospector

Doyle, Michael and David Straus. (1976). <u>How to Make Meetings Work!</u> New York: Berkley Publishing Corporation.

Fisher, Roger and William Ury. (1991). <u>Getting to YES: Negotiating Agreement Without Giving In</u>. New York: Penguin Books.

Freire, Pablo. (1970). <u>Pedagogy of the Oppressed</u>. New York: Continuum International Publishing Group, Inc.

Freire, Paulo. (1982). "Creating Alternative Research Methods: Learning to Do it By Doing It" in Budd Hall, A. Gillette and R. Tandon (eds.) <u>Creating Knowledge: A Monopoly? Participatory Research in Development</u>. New Delhi: Participatory Research Network Series 1, pp.29-37.

Garcia, Ken. (1998). "Going To the Mat For Kids: S.F. volunteer revives school wrestling, respect." In <u>San Francisco Chronicle</u>. March 14, 1998.

Grinnell, Bettie. (1998). <u>Galileo High School History</u>.

Halpern, Robert. (1999). <u>Rebuilding the Inner City</u>. New York: Columbia University Press.

Hemphill, Clara. (2000). "Public Schools that Work." <u>City Schools</u>. Diane Ravitch and Joseph Viteritti, eds. Baltimore, MD: Johns Hopkins University Press.

Howard, Ebenezer. (1898). <u>Garden Cities of Tomorrow</u>. In Richard T. LeGates and Frederic Stout, eds. 1996. <u>The City Reader</u>. New York: Routledge.

Jackson, Kenneth. (1985). <u>Crabgrass Frontier: The Surburbanization of the United States</u>. New York: Oxford University Press.

Jacobs, Jane. (1961). <u>The Death and Life of Great American Cities</u>. New York: Vintage Books.

Noguera, P. (1996). "Confronting the Urban in Urban School Reform." <u>The Urban Review</u>, Vol. 28(1).

Stoecker, Randy. (1998). <u>Are Academics Irrelevant? Roles for Scholars in Participatory Research</u>. Urban Affairs Center, University of Toledo. <u>Http://comm-org.utoledo.edu/papers98/pr.htm</u>

Stone, Clarence N. (1998) <u>Building Civic Capacity</u>.

Stone, Clarence, et al. (1999). "Schools & Disadvantaged Neighborhoods." In <u>Urban Problems & Community Development</u>. R.F. Ferguson and W.T. Dickens (eds).

Suskind, Lawrence, et. al., eds. (1999). <u>The Consensus Building Handbook</u>. Sage Publications.

United States Census. (2000). STF1 100% Data, Tables P3, P5, P12, P18, P19, P77; STF3 Sample Data (P49).

Wilson, W.J. (1996). "Ghetto Related Behavior and the Structure of Opportunity" and "The Fading Inner City Family" in <u>When Work Disappears: The World of the New Urban Poor</u>. New York, NY: Alfred A. Knopf.

APPENDIX A: INTERVIEWS

<u>**School Staff Interviewed October 1 –15, 2003**</u>

Chiu, Margaret. Principal, Galileo Academy of Science and Technology.

Delaney, Patrick. Librarian, Galileo Academy of Science and Technology Librarian

Galileo Academy of Science and Technology's Information Technology Academy Group Meeting.

Grinnell, Bettie. Galileo Academy of Science and Technology Secretary to the Principal.

Candice Wicks. Revitalizing Education and Learning (REAL).

Pringle, Katie. Outreach Coordinator, Galileo Academy of Science and Technology.

Lau, Karen. Parent Liaison, Galileo Academy of Science and Technology.

<u>**Community Organizations and Businesses Interviewed October 4-14, 2003**</u>

Blind San Franciscans Inc
(415) 563-4896   1591 Jackson St # 8 San Francisco

North Beach Citizens
(415) 772-0918   720 Columbus Ave San Francisco

Chinatown Youth Center
(415) 775-2636   1693 Polk St San Francisco

Volunteer Center of San Francisco
(415) 982-8999 1675 California Street, San Francisco, CA 94109

Lindamood Bell Learning Processes
(415) 346-6056 1600 Union Street, First Floor. San Francisco, CA 94123

Crazy Shirts
(415)921-8970 Fountain Plaza Embroidered Activewear.

Sabella LaTorre Restaurant
(415) 673-2824 Taylor Street @ Jefferson San Francisco, CA 94133

Safe Sense
(415) 351-1903   2015 Polk St San Francisco

Dance The Night Away
(415) 673-8800   1781 Union St, San Francisco

San Francisco Art Institute
(800)-345-SFAI 800 Chestnut Street San Francisco, California 94133

Telegraph Hill Neighborhood
(415) 421-6443   660 Lombard St. San Francisco, CA

Washington Mutual
(415) 474-5052   2750 Van Ness Ave. San Francisco, CA

Ana Mandara
(415)771-6800 The Power House Modern Vietnamese cuisine.

Ghirardelli Chocolate
(415) 775-5500 900 North Point Street, Suite 100 San Francisco, CA 94109

Crab Station
(415) 474-8796   2803 Taylor St # 2 San Francisco, CA

Denny's
495 Beach St, San Francisco, CA 94133
 (415) 776-3700

Scan Trends (gifts shop)
(415) 775-2217 900 North Point St. San Francisco, CA

Kissmet (gifts shop)
(415) 931-9979   2354 Polk St. San Francisco, CA

Golden Gift Shop
(415) 563-9081 1250 Columbus Ave. San Francisco, CA

Route 66 (gifts shop)
(415) 749-0781   2633 Taylor St. San Francisco, CA

San Francisco Art Institute
(800)-345-SFAI 800 Chestnut St. San Francisco, California 94133

Telegraph Hill Neighborhood
(415) 421-6443   660 Lombard St San Francisco, CA

Washington Mutual
(415) 474-5052   2750 Van Ness Ave. San Francisco, CA

Students October 4 – November 20 , 2003

6 Galileo Academy graduates (Class of 2002)
3 Galileo Academy Seniors
5 Galileo Academy Juniors
2 Galileo Academy Freshmen.

APPENDIX B: DISTRIBUTION OF HOUSEHOLDS WITH CHILDREN

Percent of San Francisco Households with Children by Census Tract
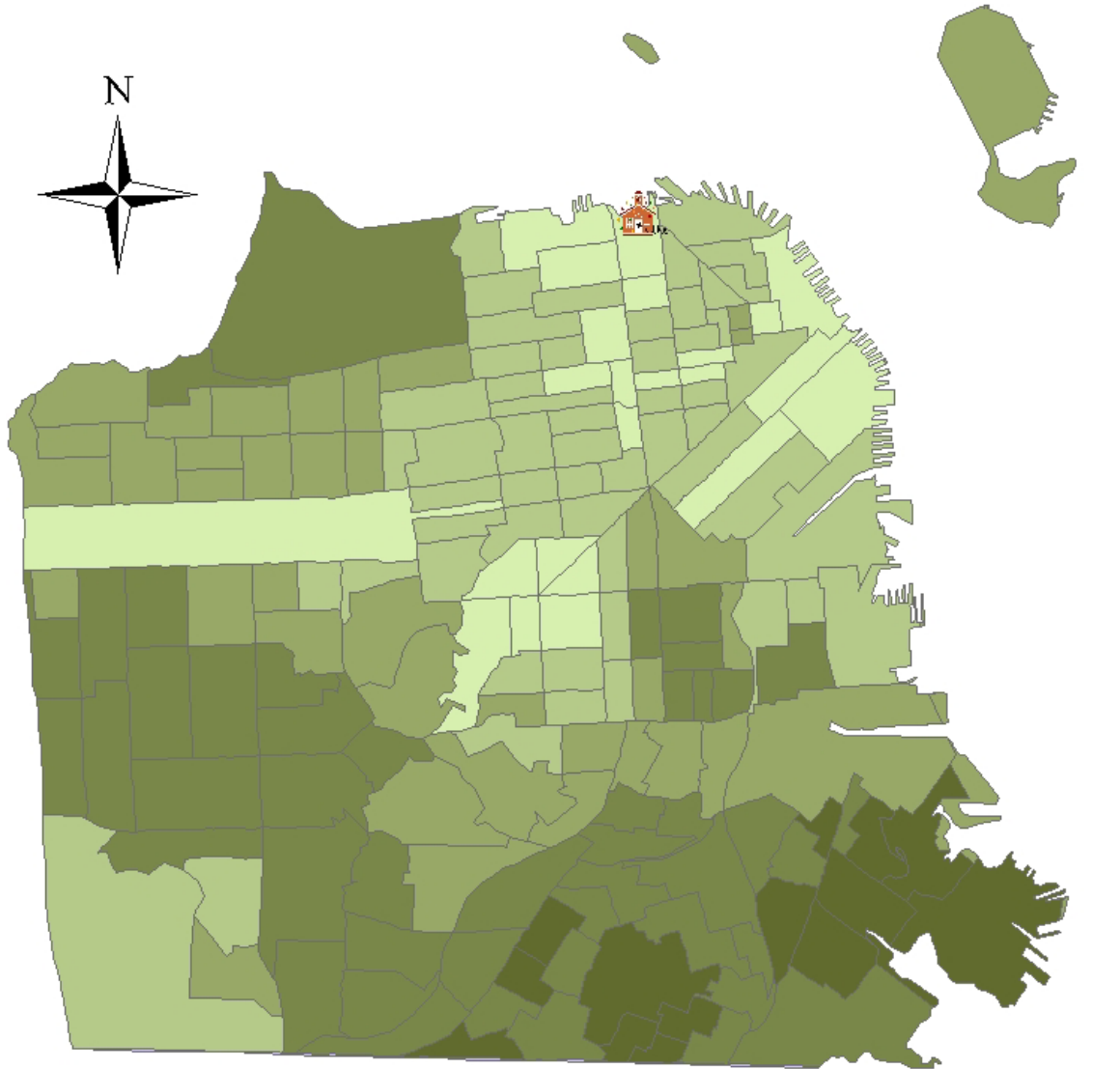
Legend

Percent of Households With Children

- Less than 6%
- 6% to 14%
- 14% to 22%
- 22% to 35%
- 35% or more

0   1.25   2.5   5 Miles