# Success and Survival in Silicon Valley An Ethnography of Learning Networks

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"I want to be out . . . not like on my own, but doing things with people, going places, being involved in things . . . instead of sitting around doing nothing." (Sue-Ellen, age 17)

#### Introduction

Silicon Valley is a many-faceted social mosaic, with diverse co-mingling cultures, extremes of income, and an unprecedented concentration of technical talent. Not every person in the region feels connected to the Silicon Valley phenomena, but everyone is affected by it as costs soar, global workers join its neighborhoods and a critical mass of technically savvy elite shape the political and social discussion of the area. One of the consequences of this complexity has been to add to the richness of informal educational opportunities. Defacto education, the organic system of recognized educational institutions, private and public, as well as the lessons that people learn beyond these institutions, abounds. How does that "defacto education" play out in the lives of various people in the region? Particularly important, how does it look to young people and the adults that are connected to them by kinship or work obligations? This report addresses a few of those questions, not in a comprehensive quantitative analysis, but by looking ethnographically at the lives of clusters of ordinary students, teachers, and workers as they find their way through the maze of defacto education.

In addition to identifying the ways in which defacto education works in the region, we were interested in how people viewed the link between education and success. How did these clusters of people, particularly the high-school aged students and the adults that mentored them, view the very concept of "success?" We assumed that given the diversity of cultural experience, people would have different criteria for defining, evaluating and becoming "successful."

This project was carried out as a collaboration between San Jose State University's Ethnographic Methods class<sup>1</sup>, acting as part of the Anthropology department's Silicon Valley Cultures Project, and the Center for Educational Planning at the Santa Clara County Office of Education. From the anthropologists' point of view, the project would target young people and the adults connected to them, building on a decade of field work that had already examined other aspects of social networks, work and learning. The project is not designed to "assess" or "evaluate" any organizational entities, schools or school districts within the jurisdiction of the Santa Clara County Office of Education. Instead, we believed we would examine "the big picture" in ways that could provide a context for the Center for Educational Planning's quantitative research agenda, contributing to the generation of new instruments and the interpretation of the results. Ethnography's strength is to identify and reveal organizations, connections, and knowledge flows that we may intuitively experience in daily life, but cannot consciously articulate. The role of friends, families, local organizations and the technologies that we use everyday, is of importance to the way we learn and the opportunities we see, but it may be below the radar, when we focus on educational institutions. Ethnography allows us to look at ourselves, doubt our assumptions and ask "obvious" questions. Hence, understanding how people create different versions of "success" would inform any measure of "satisfaction" that would be imbedded in a quantitative methodology.

We designed the research to access slices of life from the Valley. Realistically, we could not representatively sample all the complexity that is this region in a rapid ethnographic study, but we could amplify our small sample by selecting it carefully to capture a range of people, not the "average" person. We wanted to maximize the diversity of people, to understand the social context of individual lives and how those lives connected to others. So we selected four clusters of people, from areas that are demographically different, namely the West and East sides of the Valley. Individual high schools were selected to locate our clusters in real time and space, and two clusters were sampled from each district. Again, to clarify, the research was not being conducted *on* the school districts, but those areas were chosen for their contrasting demographic profiles in SES (socioeconomic status) and cultural diversity. Schools, businesses, libraries, clubs and religious organizations, are places where networks are situated. It is the networks we were sampling, not the schools themselves.

Two clusters of four people were drawn from the West side. One was based in a group that participated in performing arts and another was centered on individuals connected through an alternative high school and participation in the Rosicrucian Egyptian Museum On the East side another small cluster, again four people, was drawn from a non-profit agency that works with immigrant students and their families. The final and most elaborate and densely networked cluster consisted of twenty people—students and adults—that were connected by participation in a group of extracurricular activities and clubs.

We collected ethnographic information in three phases, layering intense ethnographic interviews between instances of observation. We sampled the knowledge of the community imbedded in the daily lives of the student researchers at San Jose State University, many of them connected to the high school realities we were sampling, as recent graduates, parents or educators. We generated a table of actual social settings in which we would be likely to observe a range of informal educational activities. The table included factors such as learning the local culture, the cultural construction of family, home, celebrating, sex and relationships, technology, mechanical skills, hobbies, recreation/leisure, sports, food, health, performing arts, music, religion, identity, fashion, job acquisition, social skills, work practice and academic skills. Two-thirds of the researchers then conducted intense observations in settings where these learning activities were likely to appear. These settings ranged from skate parks and hobby shops to immigrant support groups. The three smaller network clusters emerged from contacts made during these observations. In addition, we recruited teachers who allowed us access to a High School diversity club meeting to directly recruit students. That nucleus of students and the significant adults and peers in their networks formed the largest and most complex network cluster.

Ethnographic interviews were conducted during the second phase. Minors under 15 were not included as interviewees, although queries about them in interviews with older people and episodes involving younger people in structured observations were noted. Informed consent was collected for all interviewees; parents were consulted for interviews with minors. All transcripts and observation were altered with pseudonyms to protect anonymity. Interview questions and probes elicited details on the individuals' relationships, activities, and technological experience. All interviews were conducted in "genuine settings," ones in which people themselves actually lived. These questions fleshed out their experiences of "defacto educating" and clarified what was necessary to engage in informal education. The interviews also highlighted the relationship of informal to formal education. Secondly, people were asked questions that allowed them to reflect on the various facets of "success." To assess this without imposing our own ideas about success onto our questions, we set up an interview format in which people were queried on their best, worst and most probable near term futures relating to "success." Based on a modified version of the "Ethnographic Futures Research" technique, developed by Robert Textor of Stanford University, individuals reveal their assumptions and values by how they formulate these scenarios. We also asked them to identify successful and unsuccessful people in their networks to personalize these concepts. Thirty-four interviews then yielded new settings to be explored in the final phase of data collection, observations on critical settings which had played a role in the interviewees' lives. All student researchers participated in a workshop analyzing segments of the data set, identifying learning settings,

activities, articulation of formal and informal education, diverse models of success and how age, gender identity, class, ethnicity, sub-culture and occupation influenced the various points of view. Finally, the authors of this report concentrated on teasing out the critical features of networked learning, defacto education, and notions of success.

This project was conducted in a short time frame, on a limited sample, but it should be seen as only one of the many projects conducted over the last eleven years as part of the Silicon Valley Cultures Project, conducted by Drs. Darrah, English-Lueck and Freeman. Several, much larger and more in-depth projects inform this one. Three projects are particularly salient. First, the "Work, Identity and Community Project," sponsored by the National Science Foundation, examined the roles of work, family and cultural identity in creating community. It was designed to capture a broad overview of relationships, practices and perspectives in Silicon Valley. The second study, "Dual-Career Families in Silicon Valley," sponsored by the Alfred P. Sloan Foundation, contained a highly detailed observational study of 14 focal families, amounting to over 2500 hours of observation on parents, children and their work and learning environments. Finally, in collaboration with the Institute for the Future, Darrah and English-Lueck have investigated social and material innovations among the social networks of people in their teens and twenties, using intensive ethnographic interview and observations, in the Global Youth Network Project. This study was conducted in sites as diverse as Tokyo, Stockholm, Helsinki, London and Silicon Valley. The latter site was particularly informative and provided detailed data on how people are organized and how they can facilitate and shape learning networks.<sup>2</sup>

### Silicon Valley "Culture"

Based on the larger Silicon Valley Cultures Project, a number of striking cultural features have already been noted and could be tested within this project. Overall, the region is culturally rich, with people from literally hundreds of national and ethnic cultures coexisting, largely brought by the high-tech economy and the service industry that is supported by it. In addition, this rich "cultural stew" generates and supports different professional and organizational cultures, and creates new cultural identities around social and recreational activities, gender conceptions and preferences, religious and political beliefs, and various mixtures of the above. Diversity is not a simple thing in Silicon Valley. As Mr. Jeffries, a teacher in one of the network clusters notes, "[On this campus] you can't possibly identify [students] by looking at them. I think it a much more diverse environment for us and for our children to be in. People [are] negotiating it . . . there are definite issues." Cultural bridges have been constructed to connect the different communities. By focusing on work and using a pervasive and rather cheerful instrumentality, people may bypass differences to "get things done." People pragmatically concern themselves with technologies and techniques to build networks of people they can rely on and trust.<sup>3</sup> These rich networks can be created by individual people around their own needs, or they can be sustained by organizations. Both of these kinds of networks are seen widely across the region and replicate themselves.

The culture of Silicon Valley, although filled with powerful institutions and organizations, nonetheless "celebrates" individual accomplishment and places the burden of success and failure on the individual. People believe themselves, as individuals, to be responsible for their fates and bear the social and emotional responsibility for life-long learning and strategic planning. This means that individuals constantly walk a fine line between needing to change, "re-invent" themselves, and staying on task long enough to reap the rewards of sustained expertise. They must both be flexible enough to capitalize on new opportunities and yet sticking with a skill set and type of work long enough to accumulate expertise.

The dominance of work preparation, network savvy, individual responsibility and need to be both flexible and self-stabilizing are the cultural features that emerged from past studies, and yet underscored the lives of the young people and their adult mentors in this study. The remainder of this report explores how those qualities manifest themselves in the lives of these ordinary students, their teachers and adult peers, and the community in which they live.

#### Useful and "Kewl"

In studies of East Asia, scholars have noted that ordinary people are particularly savvy in understanding connection, relationships and the value of other people. These qualities also emerge in the clusters we studied. Two areas of life dominated the creation of these networks—technological prowess and cultural identity. In the Global Youth Network Project we saw that younger teens were often unconscious of their network and simply lived among an assemblage of friends. However, as they became conscious that other people and they themselves had skills and knowledge to exchange, the loose grouping was transformed into an active network. As one student noted, you must build a network, "to tap into one resource to get another one." (Robert, 19). Mastering technology, and mastering techniques, particularly those related to beloved recreational or mandatory school activities, fueled this pragmatism. Takero (17) has built his network around anime and Japanese language, his passion and his academic obligation, noting that by doing so he has tapped into an elite group of "friends a lot smarter than me" who can help him with his schoolwork. Building expertise around performing arts or writing fan fiction online provides a platform for people to build networks. Some of this activity can be recognized as the familiar "study group," as in Olivia's (17) "We have study groups.... We do our homework, and if one person doesn't understand, the others will help out. Help them understand and explain to them."

Other network building is plugged directly into the use of technology and may pull in expertise from families, friends and institutions. Jasmine (17) notes that when she helps others with computing and video editing "I just started out, my brother started helping me and then I just started doing it on my own. [Now] I do videos for my French class." She then acts as a resource for her group. Sam, (15) learned about MP3s from his father before they were even marketed in the United States. Every week he and his mother sits down at the computer and exchange knowledge. His mother is familiar with certain database programs from her work while he is Internet Savvy. He also knows all his friends' specialties in computing. One may know digital media programs, while another has technical hardware expertise. Davis (19) has 78 people on his instant messaging buddy list. His uncle, a manager at a high-tech company tells him how to put computers together, although not yet successfully. He says, "When we have computer parties, we bring our computers together. Jake will tell me what processors to get . . . he tells me a lot about the inside of the computer. Dan showed me how to do programming."

People lucky enough to have technical experts among family members or friends were liberated from the consequences of trial and error technical learning. These experts provided a safety net for technological experimentation so that novices could "play around" and crash the systems with impunity. Lacey, (18) noted that her father told her "just go through it. If you mess up I'm gonna fix it.'... 'click whatever and learn with it you know. Learn from your mistakes.' So, I just usually just messed around the computer and just learned it like that."

Yet this expertise is not universal. Not everyone has a computer savvy uncle or math geek friend. Even schools do not provide equal access to computing programs. Interestingly, the coveted asset was not simply access to computers, but whether one had access to programs with techno-glitter. Several people mentioned a program in a highly touted local school district in which computers were "always new" and the students were taught to type blind-folded. These were not merely computing tools, but programs with romance.

Identity formed another platform for building networks. The national, ethnic and cultural identities of the students, and their adult teachers and peers, were diverse indeed. People identified a number of cultural affiliations besides European origins including Latino, Native American, Chinese, Thai, Korean, Japanese, Vietnamese, Iranian, Ethiopian and African-American. They also identified themselves as "gay," "queer" or "geeks." Networking across and among the cultural categories was daily work. Nathan, (16) was particularly articulate about negotiating cultural differences. He provides a memorable metaphor for this experience. He tells us:

"High school is a World War II situation. I am Switzerland. I'm a neutral country, not opposed to anybody, and I have good ties with just about everybody out there. I speak everybody's

language. I know how to talk to people. I know how to talk to the homeys... I know how to talk to the hackers, 'whas up dude?'... and I know how to talk to intellectuals, 'cause that's my first language, really. And there's just so many people." He draws analogies to Nazis—jocks and popular people—and to the French—the music crowd. The nerds are the oppressed and the homeys are the Russians. "They don't like anybody... So if your allied with them, you better watch your back." He notes there are a group of popular people that defend the oppressed, "the Americans" who have come late into the war. "If you want to stay neutral in high school and have allies everywhere and know what's going on ... you have to remain neutral."

He goes on to say that he formed a club, a non-conformist club, in response to peer harassment and as a response to not "fitting in." "At times intelligence is put down . . . by other students. . . So we decided to come together for a common cause and voice together our intellectual opinions."

These are examples of networks that center on the idiosyncrasies of individuals. They may create a sustained social institution, such as a club, but they are the ultimate flexible group, coming and going with the talents and tensions of particular persons. However, there are other kinds of learning networks that emerges from the institutions in our lives. Some of these are the formal organizations that we see clearly. However, many are invisible to the young people that use them and are central to the mission of educational institutions.

#### **The Invisible Platform**

Some networks are built around the regional infrastructure, unacknowledged and often invisible to the participant. Consider the following cases.

• Jenny is Chinese-American, a 17 year-old student who is a member of a diversity club, STAND, but also active in GSA (Gay Straight Alliance, which in turn may use the Billy DeFrank Center for community events and gender identity education), International Relations (a model United Nations), and she has also attended workshops in tutoring and San Jose State University and then herself is a tutor three days a week at her at her high school. She combines a passion for equality, human rights and scholastic achievement in her activities which provide a platform for her social relationships.

•Carmen, whose family is from Vietnam, is Jenny's peer, linked through STAND, but also engaged in Interact (a voluntary community service organization), French, peer counseling and her church choir. Her network intersects Jenny's but is if formed around other platforms as well.

•Bryant is 16, attending an alternative high school, deeply involved with Rachel. His passions are robotics and archaeology. His robotics interests are supported by proximity to NASA Ames and corporate support of Lockheed and Applied Materials. His archaeological passion is sustained by the Rosicrucian Egyptian Museum, both his mother and grandmother having been Rosicrucians.

•Ann is a 61 year-old Vietnamese immigrant. She had a successful life as a businesswoman in Vietnam before she came to the region. Here she connects to her family, but has also learned to capitalize on educational resources. She has learned dance, tennis, aerobics, piano, Spanish, Microsoft 98, and ESL at Evergreen Community College and other non-profit agencies when Evergreen is not accessible. Missionaries at her church taught her how to drive in the California and the Bible. A Vietnamese non-profit organization provides classes in food and citizenship. She works in a non-profit organization that promotes education among immigrants and addresses the social issues their families are likely to encounter. She has woven together these institutionally-based knowledge centers to build her own network.

Diversity-based organizations are in turn supported by organizations such as the NCCJ (National Conference for Community and Justice) who support anti-intolerance activities and create community activities such as Camp Any Town, an experience that was widely cited by the large student network cluster as a life-changing experience that forced them to reevaluate how they viewed categorical groups, especially racial and ethnic ones.

Even those people who appear not to have institutional support, who create networks around interests such as anime (Japanese animation), do have faculty who sponsor clubs and libraries who purchase graphic novels and form a venue for club meetings. The participants in the "anime network," as mentioned earlier, capitalize on other knowledge that club members may possess to improve their technology or study skills. Participants see anime as intrinsically amplifying skills in drawing, technology, especially animation, and even cultural competence, drawing on the assumptions of Japanese culture. Fiction is written in anime universes that toy with ideas such as ideal "potential mates" and notions of good, evil and loyalty. Diane (17) comments, "A lot of people who see that would say it's kiddie stuff, but if you really watch it, each film has a deep meaning inside. It's about friendship and human striving in life." Besides, students note as a justification to themselves and their parents, club participation "looks good on college applications."

Families remain an important institutional support for learning. Some young people are able to articulate the skills and work knowledge that family members—parents, siblings, extended kin—provide. Diane knows what her father does in his work and life; he is a computer programmer that has a good income, a flexible work schedule and whose work has an interesting social dimension. She knows that mathematics is at the root of successful technology work, a concept that evades those who are not intimately familiar with the work. Maria, a young Latina non-profit agency leader, uses her father's experience as a director to help her negotiate the tricky political landscape of non-profits. Parents and grandparents teach cultural knowledge and provide a context for learning. Many others broaden the definition of family to include fictive kin, "aunts," "uncles" and almost siblings that provide an extended family base of intimates. Like co-parentship in Latin America, kin are made, transforming friends into reliable "family." Maria notes, "My best friend. . . and her family are a big source of [what knowing] family is. . . people that are always there to support you, not to put down or harm you." This form of making family is particularly evident in families that have moved to the region and lack nearby extended families.

Teachers can nurture this platform, referring to their programs as "families." Ted, a teacher and performing artist, talks about how he went to a seminar that changed his approach to teaching. He says, "When you are working with an at risk kid, they don't care about themselves. And they're not looking at the future. You can't talk to them about college because they don't have food on the table. They're living in poverty here." He says the seminar instructor told them the trick was to motivate the students so that they will work for the teacher, and that if "you can get them to do the work for you [the teachers] eventually you can get them to do it for themselves. And no matter what it takes you just have to keep being respectful to them." Ted notes that this strategy of personalization is "very hard. We're under the gun. Teach these standards, teach this, teach longer, teach faster, teach them more intense, get them more standard." In another cluster Mr. Jeffries and Ms. Sandy repeated are invoked by students as having had a great impact on them. Mr. Jeffries connected to issues of diversity though his own life. Lacey (18), one of his students comments, "He cares about that." Ms. Sandy is seen by the students interviewed as a fellow human being who models network diversity in her own life, balancing artistic friends and conservative family members. Jenny notes:

She's kind of one of the people I look up to cuz she's a teacher but she's really cool and she's able to run all these things and be in charge of things and keep on top of herself and she has a lot to work with and I know she gets tired of this stuff sometimes. And I think she's really successful cuz she's doing something she really enjoys, she's teaching and she's helping with the diversity stuff, she's been doing

that for a long time. She's a real role model for me. She's very together, she's very with it, cuz she's had crap happen to her before and she moved past that, she's a strong person, she's the type of person I wish I could be. She's able to take care of herself and still not have a problem with being around other people.

Families and other adults can also serve as non-examples, lessons to be avoided. Many details of adult life are simply unknown to the young people. In several studies, including this project, parental work is invisible to the children. "Right now... I don't know what [my mother] does" remains a common response. Mina, in her mid-twenties, a counselor at a high school comments, "There are many parents who have to work especially in this area... Two parents have to work in this, in this valley... they are working 12 hour days and 15 hour days... They're not checking on how their kids are doing in school ... there is a good percentage of those who are doing this... so kids are getting away with a lot more, kids are not having the supervision and they know it."

The erosion of adult institutional support is felt keenly. Bryant (16) comments about the loss of his robotics program and archaeology class, "Basically they are taking away a lot of the different programs [that] are beneficial to the students.[They] help me learn a lot of the stuff I am going to need for my job . . . Now they are going to be getting rid of them." Later he went on to explain, "I was actually offered an internship at NASA through the robotic program, but since I'm not in the program anymore, they're not really that interested." He has been able to use the defacto educational richness of the area to his advantage, going directly to the Rosicrucian Museum for his archaeological boost, but the lack of access makes the effort more difficult. While this is consistent with the Silicon Valley ideal that each individual bears the burden of responsibility for learning, it may be difficult for young people who have not learned the "techniques" of self-instruction.

#### Busy but Bored, Finding a Place for Reflection

In our previous studies, we noted a curious phenomenon that was clearly continued in this study. Young people, teenagers in particular, are at the center of an apparent contradiction. They are overwhelmed with the obligations of family, school, network building and carving out time to "chill," their lives are filled with "busyness." In one of the high school classrooms observed, 14 out of the 27 students had jobs in addition to their other obligations. Six of the remainder were looking for work. However, again, drawing on observations, there is also a pervasive sense of boredom. Jasmine (17) notes that "I get bored with everything" and Davis (19) justifies his street racing activities noting that "I know it is wrong, but basically I'm bored and I have nothing else to do." These are not people who have no activities filling their calendars, but they are ones who have not yet mastered the skill of reflection.

Ethnographic studies of community-based educational sites in Jersey City and Buffalo suggest that young men and women "homestead" social and physical spaces in their geographic locations and public institutions to create "spaces of deep, sustained community-based educative work, outside the borders of formal schooling." Finding such homesteads is particularly important for "identity work" in "pluralistic sites," which the authors call "recuperative spaces."<sup>4</sup> The apparent tension between busyness and boredom in Silicon Valley suggests that young people need "reflective spaces," in which reflection is modeled and the empty boring times become reflective times. Individual students talk about the process of learning "reflection." Rachel went on a desert retreat into the Owens Valley. On the way she visited the grave of Cesar Chavez, while in the high desert she went to Manzanar, the site of a Japanese internment camp. She was guided to think about the larger world, her family, her life and her place in it. While her program was largely academic, it modeled and guided reflection. NCCJ's Camp Any Town similarly provides both a venue and a process for reflecting on social relations and categories. Reflection, it appears, is an intrinsic ingredient in formulating and enacting success.

#### Success, Satisfaction and Situating Actions

Success is built around a number of criteria. It was assumed that not everyone would share the same cultural values that underpin success. Age, class, gender, immigrant experience all shape the ways in which we think of success. Any measurement or interpretation of satisfaction must take those diverse perspectives into account. Curiously, we discovered that the criteria for success did not always correspond to those of unsuccess, but reflected different values and concerns. Approximately seventy-five to eighty percent of the interviewees described success in terms of personal accomplishments such as education, working in a job they enjoyed, and owning a home. Most interviewees also discussed the acquisition of status and/or financial success as things that would make them successful. Carmen (17) notes that "Success is when you are able to support yourself, when you could be able to not depend on other people." Similarly, five participants stated that being homeless would be the ultimate "non-success."

The remainder of the interviewees described success in terms of moral reasoning. This is not unexpected since we recruited from networks involved in community service. Nonetheless, there is a social and psychological optimism that underpins these notions of success. Note below:

"So long as I can be helping people in some way, to make a difference in some people's lives" (Jenny, 17)

"I think a person becomes successful when they really find out what makes them happy." (Rosanna, 17)

Interviewees who said that they needed to have time to explore themselves in order to find their direction, had someone in their lives encouraged them to reflect on their life, their identity, and finding their true selves. In these relationships participants were encouraged to talk about and reflect on larger moral issues.

Sixty percent of interviewees gave responses to the "unsuccessful" part of the interview which expanded on the range of criteria they had used in the "success" part of the interview. When talking about success, interviewees talked about employment, financial stability, and finding a job. Questions about non-success echoed, amplified and extended the issues of moral reasoning. For example Ted (44) who had thought being an administrator might be a measure of success described non-success as "It would be being in a rut. Not enjoying what I am doing. Not evolving, not moving forward, not having bigger dreams and aspirations." A student echoed this sentiment noting, "Unsuccessful? I'd be alone, no friends. I'd be at some goofy desk job in a cubicle-world, typing away and not getting out, just going home, go to work, go home, go to work, go home, that kind of life." Consistently, people found material criteria to be important in viewing success, but moral ones to be relevant to failure. The sense of self that is so obvious in people's notions of unsuccess is directly linked to being connected to teachers, mentors, and other community leaders and being given the space and skills to reflect. Six students identified the need for space, away from school, family, organizations to be able to "find themselves" and construct their own identity.

Several participants identified themselves or their parents as first generation immigrants. In these families, participants often spoke more strongly of success, with concrete plans and visions of success, directly linked to parental dreams of educational and financial opportunity. Success was described in a more tangible way (career, home, and money) as compared to other participants whose description and paths were less concrete.

"Success is just a really big plan for me. My family ... everybody is successful ... I don't want to be the failure one in life ... Success is a big part of my life ... just to succeed at everything. And a big part of my family too, my dad [has] succeeded in his life, my mom, everybody in my family. So I don't want to be the only one whose left out and not succeed." (Lacey, 19, an Ethiopian immigrant)

As a parent, Ann (61) described how her model of success changed after moving from Vietnam to the United States.

"In my country [Vietnam], first is money, then education. In here [America], if I have education, I have power. If I have money nobody knows me, nobody asks me anything. In here, money is nothing if I

can't speak English (education)." "I don't care about money, I care about education. I have to go to school; to get an education is better than money."

One interviewee spoke of the distance that education (and different life values) created between her and her family.

"And I'm the first one in my family to be educated, all my sisters and brothers all have high school diplomas and they didn't even know I went to college 'cause I didn't tell them 'cause that would just put me further and further away from them." (Iris, Mexican-European, 54)

Overall, practical obstacles such as lack of transportation to educational settings, difficulty scheduling time, competing obligations, money and lack of education were also identified as potential barriers to success, but this occurred much less frequently than the identification of self as a potential barrier. Interviewees most often identified their only obstacles to future success as themselves. This is, as was noted earlier, consistent with the Silicon Valley ethos that suggests we are all "empowered" and responsible for our own fates. Note the comments below:

"Probably just giving up on school and just coming back to my parents saying 'Oh I can't do it, I don't care.' Just kind of like giving up and everything." (Sue-Ellen, 17)

"Losing my inner strength ...." (Kitty, 18)

"There's nothing keeping me from it, but what I make of myself." (Jasmine, 17)

Central to the burden of responsibility is the hidden strategic work of molding ones future self. That self must be flexible, but yet stay on task. Change is a constant factor, and underpins the notion of "re-inventing" oneself to maintain a strategic advantage. Life "changes from day to day." (Ted, 44). "There's a lot to me and I keep finding more and more. I think wow! Ok! It's putting a lot of pieces together and then sometimes it changes" (Sue-Ellen, 17). "I have trouble imagining the future because I've always thought of it as being very changeable ...One day I could stop liking this thing and I'll learn something else and so my entire future is changed." (Jenny, 17). Given the inevitable change, young people worry that being "too focused" will undermine their success. The remedy to that change is choosing the right tactic and maintaining sustainable focus. Bryant believes unsuccess may lurk behind indecision, "Just not staying on task, not being focused ..." Again, work on the future self requires effort juggling competing requirements. To be successful, plans must embrace both change and sustainability, shifting direction on a moments notice and steadily building a body of expertise.

These notions of future success and unsuccess are broadly writ, and contain the seeds of plans for actions, situated in a future in Silicon Valley. Lucy Suchman, who has studied the relationship of plans to actions notes "For situated action, however, the vagueness of plans is not a fault, but is ideally suited to the fact that the detail of intent and action must be contingent on the circumstantial and interactional particulars of actual situations." Plans become "resources for action."<sup>5</sup>

The question for the Center for Educational Planning is how to interpret ordinary people's "plans" for achieving success, and avoiding unsuccess, and institutionalize them in concrete educational actions. This project has uncovered several lessons that might be of use. First, the region is rich with educational opportunities, formal and informal, and savvy individuals know how to make these opportunities work for them. Second, learning networks are intrinsic to making the defacto educational opportunities available. Such networks can be built around individuals or organizations. Facilitating both kinds of networks may be critical to sustaining effective learning networks. While people perceive it is their individual responsibility to learn and succeed, the motivations and mechanisms for learning can be constrained or enhanced by institutional supports. Finally, success is variously understood and needs to be interpreted, not as a single phenomenon, but as something that means different things to different constituents. While the material aspects of success cannot be ignored, reflection on moral issues is also critical. That moral reflection is not an automatic given, but again, can be nurtured or diminished with institutional supports.

## Endnotes

1. Student researchers included Ryan Amaro, Christian Bonner, Kelly Boyle, Timothy Bucy, Yen Do, Kara Fox, Therestia Gonzalez, Hideo Ikeda, Rossana Mutia, Guillermo Narvaez, Julie Perreira-Rieken, Ofelia Pinero, Barbara Redman-White, Craig Robertson, Layna Salzman, Terri Schneider, Sheri Swiger and Sabrina Valade. Dr. J. A. English-Lueck was the primary advisor and project director. Dr. C. Darrah, also advised and consulted on the project. Mary McCuistion, in the Anthropology/Behavioral Science program, acted as liaison to the Center for Educational Planning.

2. Reports and papers from various projects of the Silicon Valley Cultures Project can be found on the website, http://www.sjsu.edu/depts/anthropology/svcp/.

3. J.A. English-Lueck, Cultures@SiliconValley (Stanford University Press 2002).

4. Michelle Fine, Lois Weis, Craig Centrie and Rosmarie Roberts, "Educating beyond the Borders of Schooling." Anthropology and Education Quarterly 31 (2000): 131-151.

5. Lucy Suchman, Plans and Situated Actions (Cambridge University Press 1987: 185-186)