The Role of Community Technology Centers in Youth Skill-Building and Empowerment

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August, 2006
Is There a Digital Divide? Home Computer and Internet Access for Youth 5-17 (2003 CPS)

- **Home Computer**
  - White: 87.0
  - African American: 55.1
  - Latino: 56.3
  - Asian: 84.6

- **Home Internet**
  - White: 79.1
  - African American: 42.3
  - Latino: 42.5
  - Asian: 73.3

Legend:
- **Home Computer**
- **Home Internet**
The Digital Divide is Larger for Youth 5-17 than Adults: White/Other Gaps in Home Internet Access (2003 CPS)
The Digital Divide by Income: Home Internet Access by Income and Race/Ethnicity for Youth 5-17 (2003 CPS)
Where Do Youth (5-17) Use the Internet? (2001 CPS)

<table>
<thead>
<tr>
<th>Location</th>
<th>White</th>
<th>African American</th>
<th>Latino</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>82.7</td>
<td>59.9</td>
<td>62.8</td>
<td>88.4</td>
</tr>
<tr>
<td>School</td>
<td>68.5</td>
<td>66.7</td>
<td>66.7</td>
<td>58.8</td>
</tr>
<tr>
<td>Library</td>
<td>12.4</td>
<td>29.1</td>
<td>19.7</td>
<td>16.8</td>
</tr>
<tr>
<td>Community Center</td>
<td>0.8</td>
<td>0.8</td>
<td>1.6</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Legend: Yellow = Home, Light Green = School, Green = Library, Gray = Community Center
Which Youth (5-17) Use the Internet at Various Locations? (2001 CPS)
Computer Use and School Enrollment Among Youth 16-18
(Fairlie 2005) (2001 CPS)

Unadjusted Gap in School Enrollment for Youth With and Without Home Computers

Adjusted Gap in School Enrollment for Youth With and Without Home Computers
Study Overview

- Examine CTCs as a point of access for youth
  - Try to understand what it is about technology that makes youth succeed
  - How do youth experience services and opportunities offered at CTCs
  - How do CTC experiences shape youths’ views and future goals
Why Focus on CTCs?

- CPS shows low access, but may be underreporting
- Disparities in quality of technology across schools
- Inadequate supply of computers at schools and libraries
- CTCs can offer experiences schools and libraries cannot
Methods

- “Field trip” to Playing2Win in Harlem
- Conducted focus group with 12 participants representing policy, academia, CTC, education, government and foundation
- Conducted five CTC case studies in the Fall of 2004
  - Team of two or more researchers spent two to three days visiting the CTC
  - We interviewed CTC staff and instructors, youth participants, community partners, and in one case parents
  - We observed CTC activities, reviewed key program documents, and viewed the products that youth created using technology they learned at the CTC
Analysis Framework: Personal and Social Assets (National Academies)

- Four areas of personal and social assets that facilitate positive youth development (Eccles and Gootman 2004):
  - **Physical development** — including the importance of health;
  - **Intellectual development** — including life skills, vocational skills, critical thinking, decision-making, and an ability to navigate different cultural contexts;
  - **Psychological and emotional development** — including positive self-regard, emotional self-regulation, conflict resolution skills, confidence, personal responsibility, and a commitment to good use of time; and
  - **Social development** — including connectedness to adults and peers, social integration, attachment to a conventional institution, and commitment to civic engagement.

- Individuals need not possess the entire list of assets in order to succeed, but the report concludes that having more of these assets is better than having fewer
Eight attributes of settings that promote positive youth development:

- **Physical and psychological safety** — including health promoting and safe peer interactions;
- **Appropriate structure** — including clear rules and expectation, continuity and predictability, and age-appropriate monitoring;
- **Supportive relationships** — including good communication, closeness, support and guidance, and responsiveness;
- **Opportunities to belong** — including inclusion regardless of gender or ethnicity and opportunities for socio-cultural identity formation;
- **Positive social norms** — including expectations of behavior, values and morals;
- **Support for efficacy and mattering** — including practices that support autonomy, offer responsibility, and provide meaningful challenge;
- **Opportunities for skill building** — including exposure to learning experiences, preparation for employment, opportunities to develop social and cultural capital; and
- **Integration of family, school, and community efforts.**
Community Technology Centers Visited

- Bresee Foundation, Los Angeles
- Firebaugh Computer Learning Center, Firebaugh, CA
- HarlemLive, Harlem
- Lowell Telecommunications Corporation, Lowell, MA
- Technology Access Foundation, Seattle
Themes — CTC Involvement and Youth Transformation

- CTCs Provide skills-building opportunities;
- CTCs help youth create social networks within their peer groups, with mentors at the CTC, and with other adults in the community;
- CTCs promote autonomy, leadership, and self-esteem through creative control and storytelling;
- CTCs offer youth an opportunity to engage in community building and advocacy activities.
CTCs and Youth Skill-Building

- Build technical skills that can be critical for job market (e.g., TAF)
- Skills can be transferable to other areas (e.g., HarlemLive, LTC, Bresee)
- Technology as the “hook” but learn other things
  - Preparation for world of work (project-oriented learning, TAF TTIP training)
  - Promote leadership skills (e.g., HarlemLive)
  - Help express themselves in words and pictures
  - Teach them responsibility
  - Build their self-esteem (focus on youth)
  - Foster their critical thinking skills
- Focus on other important areas, such as college planning and financial aid, which is important for students with limited resources at school
CTCs as Creators of Social Capital

- Bonding social capital — ties within communities that are "horizontal" (peer-to-peer relationships)
  - Supportive relationships (e.g., HarlemLive)
  - Opportunities to belong, including physical safety (e.g., LTC/UTEC, FCLC)
  - Positive social norms (e.g., Bresee)

- Bridging social capital — ties to individuals who are not aligned in social status, resources, or geographic location, and who may provide a mechanism and contacts to "get ahead."
  - Staff mentoring (Bresee, FCLC)
  - Opportunity to connect to a world different than one’s own (networking) (e.g., HarlemLive, TAF)
Autonomy, Leadership and Self-Esteem Through Creative Control and Storytelling

- Multimedia as a way to encourage youth to think about and report on their environments
- Creative control is empowering
  - Decision-making power to say what they want about themselves, their lives, their communities, contrasts with other aspects of their lives
  - Control content, how information is presented and to whom
- Storytelling is central to empowering youth through technology
  - Tell own story from whatever angle they choose (most are focused on issues of race, class, ethnicity and gender)
  - Communicate pride in heritage and traditions
  - Bolster cultural resistance to mainstream media’s misrepresentation and distortion of youth and their communities
  - Voice is different from what is expected at home, school, workplace
- Promote autonomy by focusing on youth, not their parents or teachers
The first “C” in CTC: CTCs as Community Members

- Centers located as hubs of civic life in areas that generally lack such institutions
  - Affirm basic necessities of physical safety, familiarity, proximity, and accessibility (e.g., LTC/UTEC, TAF)
  - CTCs were located in neighborhoods that have schools and libraries without ability to high quality technology access and services (e.g., FCLC, Bresee)

- Community-building and civic engagement promoted by CTC staff
  - Leadership development, such as public speaking, presentations, and community based research to promote future civic participation (e.g., HarlemLive, TAF)
  - Social awareness and community organizing (FCLC, LTC/UTEC, Bresee)

- Promote other important agendas (e.g., Bresee-health) or partner to provide support services
Conclusions

- Four sets of findings are interrelated
  - Skills-building activities affect youth directly through workplace skills and indirectly through the empowerment and self-esteem that stem from the application of these skills.
  - CTCs promote integration of disadvantaged youth into broader social and community networks and at the same time position themselves as community hubs and resource providers
  - CTCs link skills mastery with the creation of social capital in ways that offer youth an opportunity to take their newly acquired empowerment and use it to improve their lives and their communities
- CTC field should be explicit about combining social capital and youth development
  - Youth development is about providing supportive peer networks and connections to other worlds of opportunities; the digital divide is a concept about technology but also social distance
- Programs should provide bridges in intentional ways because can be a lasting effect; CTC directors are clear about this bridging role