Best Practices for Integrating Technology and Service Learning in a Youth Development Program

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SUMMARY. The Long Beach YMCA Youth Institute is an innovative program that uses technology and service learning as a mechanism for promoting positive youth development while enhancing the academic and career readiness of low-income, culturally-diverse, urban high school students. This article describes the Youth Institute and identifies best practice principles for the use of technology and service learning in youth development programs. The best practice principles, based on focus group data with 170 youths, are reaching underserved and culturally-diverse youths, utilizing project-based learning for teaching technology, preparing for the

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workplace or higher education, involving youths in service learning, and encouraging personal growth and development. doi:10.1300/J394v03n03_14

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INTRODUCTION

Community-based programs for high school youth to promote youth development have been in existence for a number of years. However, in the last half-decade, after-school programs for teens have become central to policy debates on education and federal funding. These programs have increased from $40 million to $1 billion. Evaluation studies to measure effectiveness of these programs have proliferated but there are no clear standards about what these programs are achieving. Most studied programs have focused on positive youth development or helping youth explore new talents and interpersonal skills (Granger & Kane, 2004). These studies have indicated that when youths participate in these programs, they are likely to benefit in a number of ways: (1) higher academic achievement and interest in furthering their education; (2) more positive self-image; (3) more positive social development; (4) reductions in risk-taking behavior; and (5) better school behaviors and fewer absences. A protective factor associated with positive youth development is youths' constructive use of their out-of-school time. Correlational evidence indicates that youths involved in after-school programs frequently demonstrate greater benefits as a result of participating in them (Harvard Family Research Project, 2004).

Despite the benefits identified in the literature, a continuing challenge to community-based programs for high school youth is to actually recruit and retain youths. A number of barriers may prevent youths from active involvement including a student's desire to relax after school with friends, work and family responsibilities, boredom or lack of interest, and transportation/safety issues (Harvard Family Research Project, 2004). These issues have forced community-based programs to respond to what high school youths desire in after-school programs. Programs have been reinventing their mandates to include better educational and

employment opportunities particularly in the areas of technology and service learning (The Forum for Youth Investment, 2004).

A YMCA study (2001) suggested that providing teens with routinely structured after-school activities keeps them positively engaged and less interested in engaging in risky behavior. A structured environment with activities teens enjoy also helps them do better in school and prepares them for a more productive adulthood. Structured community or neighborhood-based activities in after-school programs, particularly those that help them get better grades, increase their chances of getting into college, and help them learn skills that will contribute to life success. Programs that focus on technology and service learning have been successful in promoting positive youth development among high school youth (Melchior, Thortensen, & Shurkin, 1998).

Despite the positive benefits of community-based after-school programs and the fact that many North American high school youths participate in such programs, the YMCA study (2001) indicated that over half of teens surveyed wished there were more community or neighborhood-based activities. Teens surveyed in this study reported that there was not enough to do after school as well as a high level of interest in after-school programs. A review of youth development programs in the US indicated that there existed few programs that targeted high school youth and even fewer programs that focused on technology and service learning (Harvard Family Research Project, 2004).

Although a number of studies exist that focus on success factors for community-based programs in general, as well as technology and service learning programs (Breeden, Cisler, Guilfoy, Roberts & Stone, 1998; Chow, Ellis, Mark & Wise, 1998; Chow, Ellis, Walker & Wise, 2000; Mark, Cornebise & Wahl, 1997), no studies have addressed the combination of community-based programs that utilize technology and service learning as a way to promote positive youth development. The focus of this article is to describe a youth development program that combined technology and service learning for high school youth and discuss some best practice principles developed from the evaluation of this program. Qualitative data will be discussed as it relates to best practice principles identified as important to the positive youth development associated with this program.

Program Description

In October, 2001, the James Irvine Foundation funded the Long Beach Communities Organizing Resources to Advance Learning (CORAL) proj-

ect, a seven-year initiative designed to improve academic achievement by mobilizing families and aligning community-wide networks of out-of-school resources to support student learning. The project, led by the YMCA of Greater Long Beach, is a collaborative endeavor of parents, non-profit organizations, city agencies, and schools. One CORAL program component is the YMCA Youth Institute, an intensive, year-round program that uses technology as an integral mechanism for promoting positive youth development and enhancing the academic success and career readiness of low-income, culturally-diverse high school students. The program focuses on many of the important success factors of positive youth development discussed in the literature as well as technology and service learning opportunities.
The goals of the Youth Institute are to:

1. Provide intensive, year-round enrichment experiences to low-income, culturally-diverse, urban high school students that integrate and emphasize technology.
2. Use youth development principles and project-based learning to promote leadership skills and cultural tolerance and to ensure that participants remain actively involved throughout their high school careers.
3. Teach program participants technology skills in the areas of Web design, digital story telling/movie making, animation 2D & 3D, digital graphics, connecting and maintaining computer networks, and presentation and office software.
4. Improve the academic achievement of participants through homework assistance, monitoring school performance, use of technology for assignments, equipment loan, college readiness and preparedness classes and linkage to district content standards.
5. Provide service learning opportunities and paid technology internships so participants can teach technology to others and develop job readiness skills.

METHOD

Data Collection

Twelve focus groups were conducted with all current Intensive Summer Program youths participating in the program as well as alumni par-

ticipants in August 2003 and 2004. The groups met for two hours with a trained facilitator to answer a series of questions. These focused on: reasons for involvement, recruitment, program activities, technology knowledge and skills, access to and use of technology, staff, personal and social growth and development, community involvement, perceived program effects on academic performance and interest, leadership skills, and acceptance of cultural diversity. The sessions were conducted in English and were audiotaped and transcribed verbatim. The focus groups for alumni and current participants were held separately. All youths, and when appropriate, their parents, signed informed consent letters prior to participating in the groups.

Sample

A total of 70 youths from the 2003 and 2004 CORAL Youth Institute Intensive Summer Program (95% of total sample) participated in the current participant focus groups. One hundred of the alumni participants from the 2001, 2002 and 2003 youth participants (75% of total sample) participated in the alumni focus groups. The total sample size was N = 170 youths who participated in the focus group study. The qualitative data gathered from these focus groups was analyzed using content analysis with Ethnograph v 5.0 software. Themes were analyzed for patterns of similarities, dissimilarities and frequency.

RESULTS

The themes that emerged from the data identified five categories of best practice principles for integrating technology and service learning in youth development programs. The categories were: (1) reaching underserved youth with a focus on ethnic and cultural diversity, (2) utilizing project-based learning for teaching technology, (3) preparation for the workplace and/or higher education, (4) roles of youth participants in service learning, and (5) importance of personal growth and development.

Reaching Underserved Youth with a Focus on Ethnic and Cultural Diversity

It is clear that technology is impacting every facet of life in the 21st century and that enormous opportunities exist for those young adults

who possess the skills and knowledge of this "21st century literacy" (Wilhelm, Carmen & Reynolds, 2002). However, there still exists a gap that separates the technology haves and the have-nots, sometimes referred to as the "digital divide." Eamon (2004) defined the phrase "digital divide" as "the disparity between individuals who have and do not have access to information technology (IT)" (p. 91). This disparity reflects existing social stratification patterns of race, ethnicity, and income in the United States (Steyaert, 2002). The U.S. Department of Commerce *Report on Digital Inclusion* (2002) found the following:

> Certain groups (such as Whites, Asian Americans and Pacific Islanders, and those with higher income and education levels) have higher than average levels of computer ownership and Internet access. These groups have generally exhibited greater percentage point changes (that is, the change in penetration rate from one survey to the next). On the other hand, they exhibit slower expansion or growth rates (i.e., growth in the percentage rate). At the same time, groups with lower penetration rates (such as Blacks, Hispanics, and those with lower income and education levels) are exhibiting smaller percentage point changes but higher expansion rates because they are starting from a much lower base and have more opportunity for rapid, and greater, expansion. (p. 6)

While the Department of Commerce (2002) report indicated tremendous growth from December 1998 and August 2000 in household computer and Internet use among all demographic groups, it also found that some Americans were still connecting at far lower user rates than others. This indicated that digital inclusion appears to be proceeding unevenly among different demographic groups. The U.S. Department of Commerce (2002) summarized computer and Internet use among U.S. youth, ages 10-17:

- Youths in low-income families (less than $15,000) are eight times as likely not to use computers at home as youths in higher income families (more than $75,000);
- Hispanic youths are more than three times as likely as white youths to not use a computer whereas Black youths are more than two times as likely as white youths not to use a computer;
- 54% of low-income youths (family income of less than $15,000 annually) still do not access the Internet at all (at any location)

> compared to 12% of youths in families earning more than $75,000 annually.

Youths with access to computers and the Internet gain educational, employment and other opportunities for enrichment. However, it is clear that low-income and minority youth are more at risk of not achieving these benefits. Thus, more community-based programs are finding ways to increase access to and use of technology in their after-school programs particularly for low-income and ethnically diverse high school youths (Harvard Family Research Project, 2004).

Given the data regarding the "digital divide" and these digital inclusion issues, a key focus of the Youth Institute has been to provide programming to low-income, culturally-diverse, urban high school stud- ents that integrates and emphasizes technology. As Table 1 indicates, participants are selected to represent, to the extent possible, gender and ethnic diversity.

Incoming participants take part in a full-time (35 hours), eight-week summer program. The first week is spent at a wilderness retreat at King's Canyon National Park and focuses on team-building, cultural diversity training, decision-making, and life sciences. Participants are assigned to project teams that will be maintained throughout the summer so there is an ethnic and gender mix. Initiative games and a low-ropes course are used to promote group cohesion and leadership skills while improving problem-solving and communication skills. Activities designed to increase cultural awareness and tolerance are integrated into the week. This week is critical to program success because it helps participants to develop the group- and problem-solving skills they will need to successfully work in groups to accomplish their summer tasks (O'Donnell & Coe-Regan, in press).

Focus group data suggests that reaching underserved youth and focusing on cultural diversity, team-building and bonding has been one of the key components of the program. Focus group participants indicated many positive aspects of the training and retreat that emphasized cultural awareness and tolerance. Here are a few of their verbatim responses:

> When I heard about learning about dealing with different ethnicities and learning other cultures and hanging out with different ethnicities, that kind of drew me in more because that's what I wanted to do.

TABLE 1. Sample Description of Youth Institute Focus Group Participants (N = 170)

	Percentage (%)	Number
♦ **Gender**		
Male	55%	93
Female	45%	77
♦ **Ethnicity**		
Latino	31%	53
Asian American/Pacific Islander	36%	61
African-American	15%	26
Bi/Multicultural	9%	15
European-American	9%	15

> Being a part of the Youth Institute made me think that even though we are all different colors, we are still human beings. We treat everyone the same and you were forced to be with people you didn't like and you just had to get along with that person.

> When we all came to that first meeting, we were distant from each other. We didn't know anyone and were afraid to say hi. I knew one person and we did not want to talk to anybody else because we were afraid. Then on that retreat we bonded more because we were put into groups with people that we did not know. We had to bond in order to finish certain tasks or cook dinner or breakfast, and we had to work together and that is what brought us closer.

Focus group participants were also asked about what they learned about other cultures and how that knowledge had influenced them in terms of personal development and future plans. Most discussed how much they learned to respect other cultures and take pride in their own culture. They also discussed how they learned from each other by being involved in one another's cultural traditions:

> I have learned to respect all the cultures. They all have their own traditions and we have learned that to be part of a culture and proud of what it is.

> I learned that all cultures, no matter how different they are, their basic fundamentals always involves family, friends and friendships.

> I also learned and understood that everybody is not the same. Everybody has their own way of being. Every single culture is not the same–they always have some kind of differences but also have their similarities.
>
> I learned a lot about the different ethnic backgrounds. Instead of just being Asians, there are Cambodians and people that come from China. There is not just Asian, there is Cambodian and all kinds of different cultures.
>
> I respect every culture even more now I learned about them. I didn't even know what a "quinceñera" was until they told me. It's probably the number one reason why I joined CORAL– all the ethnicities and diversity in here.
>
> It is important to understand other cultures because it gives you something more to talk about and you communicate better as well.
>
> I want to travel the world now.

The focus group data suggested that nesting programs in communities, particularly in low-income and ethnically-diverse communities, and ensuring the ethnic and gender diversity of participants has been a practice principle with positive benefits. Also, the ethnic and gender mix among participants and staff is a key principle that leads to other learning opportunities about cultural diversity.

Project-Based Learning for Teaching Technology

The Youth Institute Program uses project-based learning to teach information technology skills. Projects include: (a) digital story telling/ movie making, (b) graphic design, (c) Web site creation, (d) presentation and office software, (e) 3D animation, and (f) use of peripheral hardware (i.e., scanner, DV cameras, etc). A wide range of the latest software is used including Cinema 4D, Adobe Illustrator, Adobe Photoshop, I-Movie, Final Cut Pro, Power Point, Keynote, Pagemaker, Flash, Extensis InDesign, and Macromedia Dreamweaver. Participants also learn how to connect, troubleshoot and use computer networks. All classes have a curriculum description that identifies the pedagogical approach and the skill sets to be learned while linking the content to school content standards (O'Donnell & Coe-Regan, in press).

Products in the Intensive Summer program include animated logos, five- to ten-minute movies, a magazine focused on teen issues and a Web site. All projects are designed to help participants gain literacy, math and higher-level thinking skills, are linked to school content standards and completed in teams.

Focus group participants were asked about what knowledge and skills they gained from participating in the Youth Institute program activities and specifically about the technology skills they developed. Participants mentioned increased knowledge and skills in a number of technology and digital media areas when asked specifically about technology gains. These areas included: (a) knowledge of different computer operating systems, (b) use of software such as Cinema 3D, Excel 1, GO 1, Final Cut Pro, Adobe Photoshop and Illustrator, and (c) development of skills in web and graphic design, making and editing a movie, using cameras and camcorders, creating a presentation, and storyboarding.

Many students discussed their experience of being placed in project teams to carry out multiple assigned tasks toward the creation of a short film and a Teen Magazine. Most of the focus group participants mentioned this opportunity as something they enjoyed as well as a method to learn career readiness skills in addition to technology skills. They were excited by the opportunity to learn new technology skills particularly in the areas of movie-making and web design. They also enjoyed the opportunity to learn about graphic design and animation.

However, many reported that they disliked the process of putting their technology skills to use particularly when dealing with editing, deadlines and having to work as a team. Despite dislike for working in a group, many found that the technology projects created opportunities to get to know each other better. They said things like *"I liked doing the graphic design and animation," "I liked doing the editing and the Web design. I liked the movies, the whole process of doing the movie editing and all the graphic design that comes with doing a movie," "Being in everybody's movie you got to know each other and bond as a family" and "Editing was just bad because it took forever and if you are not a patient person, then it will just keep driving you crazy but everything else was great."* Some participants found software such as Cinema 4D and i-Design to be difficult while others found the movie-making the most useful activity.

The implications of using technology in an environment of project-based learning were highlighted in data from the focus groups:

> We had production groups and we filmed the field trips we went on such as the news group and the art museum. I liked that group. We had to work with other people that we usually wouldn't work with.
>
> I learned a lot of technology things that I don't think I would have ever learned until I went to college for the actual major. But even then you have to wait until your junior year before you can even go into the field. It's nice that we had a head start with all that technology. You learn a lot of office skills such as how to meet deadlines and how you actually get paid based on the product you put out. It's like a corporate job in that you learn how it is in the field. You also deal with people in that kind of situation and realize you have to just get over your differences to produce the product and get it done.
>
> I learned to express myself through film. You make movies that come from you that included my identity and individuality according to media.
>
> Working in our production groups to produce our videos helped me realize that responsibility and working together is not always going to be easy. You have to compromise, even when you struggle and fight. You have to get over the struggle and make your deadline to do quality work so that people like what they see or want to hire you.

Blumenfeld, Soloway, Marx et al. (1991) concluded that technology can play a powerful role in project-based learning. Technology contributes to students' learning by enhancing interest, giving more access to information, providing active representation with the multimedia capabilities of technology, structuring the process to provide more tactical and strategic support, diagnosing and correcting errors more easily, managing complexity and aiding production, and providing potential for motivating students to carry out projects.

The findings from the focus group participants suggested that teaching technology skills and competencies in a project-based learning format helped participants further develop a diverse range of skills. Suppes (1980) found that technology project-based learning that emphasized the learning of process was a much more important skill than specific skill acquisition. Blumenfeld et al. (1991) noted that project-based

learning led to a number of skills including solving real problems with real solutions, working with others, gaining deeper understanding and improving competence in thinking. These problem-solving and planning skills could be used in both the school and work arenas. The literature and findings from this evaluation indicate a number of positive benefits of utilizing project-based learning to teach technology skills and competencies.

Preparation for the Workplace and/or Higher Education

Most of the focus group participants stated that the reasons for applying to the Institute, aside from the stipend, were the opportunities to learn about computers and software, and gain technology skills for the future. Alumni participants particularly mentioned college as many were deciding about career and college plans.

> It kind of gave me an idea of what I want to do after college or during college.
>
> Before I came to CORAL, I didn't know what I wanted to do. I was kind of interested in business but I heard that sometimes it is not successful. I learned about options like Web design, editing, filming, and stuff.
>
> Along with doing better at school, I think it is going to help us with our jobs, because as we grow, the future is going to get more technical and it is good to know about computers, the Web and researching.
>
> If I didn't join the program, I would probably still be trying to figure out what I want to be and what I am going to do, what college and what degree I want to get. Right now I want to be in editing videos. I want to go to a college for that and get a degree in it. I want to extend what I know.
>
> Before I didn't know what college I wanted to go to but now I know. There are tremendous amounts of resources here and there are a lot of people who know stuff around here. So if we have computers and all, it will open many windows and I can look into all of it.
>
> This place is a big connection because if you want to get into a certain career, they help you research it and see if you like it or not.

> The staff encouraged us to go to college because it can eventually give us a better job.

The focus group data indicated that the use of technology in a community-based program led to academic and career interest, knowledge and skills and served as way to recruit and retain youth in a community-based program. The Harvard Research Project (2004) suggested the need for programs to connect participation in a program with positive benefits such as better educational and employment opportunities. The opportunities to learn marketable and standard technology skills and receive a stipend for participating are key practice principles for engaging youths in a community-based program. The focus group data indicated that participants connected a "brighter future" with program participation.

Focus on the Roles of Participants in Service Learning

Baker, Jeffers and Light (1999) found that programs that use young people as mentors and teachers to their peers, younger children and adults are successful in engaging youths in a program. In a 2001 study by the YMCA, two-thirds of teens indicated interest in participating in academic, leadership and community service activities. They found that community-based programs that sustained student interest and had positive effects for teens often included employment or service learning opportunities. The Afterschool Alliance (2004) defined service learning as a "form of instruction in which students design projects to address community needs as part of their academic studies" (p. 1). After-school programs often use service learning as it has been shown to increase youths' learning and academic achievement. It also develops leadership skills and ties to the communities that are positive aspects of youth development practices. Service learning has been particularly popular with older youths in high school (Harvard Family Research Project, 2004).

The Youth Institute requires all participants to spend at least a month providing community service at CORAL elementary schools. High school students take digital cameras and laptops to the schools to teach children technology skills. They teach higher-level skills such as movie-making, graphic design and Internet research as well as the use of academic software. Participants have additional service learning opportunities to apply their technology skills. For example, they have made promotional videos for the Long Beach Museum of Art and a lo-

cal high school. Upon completion of the summer program, they are also eligible for paid technology internships. Examples of these include serving as peer teachers during the summer and year-round program, setting up a computer network and training non-profit staff on computer skills, making promotional videos for local non-profits, and teaching local middle school students technology skills at the request of Apple Computers. These volunteer and paid experiences require participants to work in teams and teach a wide variety of job skills needed in the work force. The Youth Institute has also placed participants in externships with petroleum companies and with a local medical clinic (O'Donnell & Coe-Regan, in press).

The vast majority of the responses to service learning activities made by focus group participants were positive. Focus group participants were asked about what aspects of the program taught them the most and least as well as what contributed the most to their learning and development. Many focus group participants talked about how they had been able to share and use their knowledge and skills with others outside the Youth Institute. The majority of the participants talked about doing community service that involved teaching Girl Scouts, younger children and friends the technology skills they acquired. They also talked about sharing their knowledge with their families and teachers at school, as they were allowed to check out laptops and other technology equipment to take home and to school for projects and presentations.

> I liked the community service where we go to the elementary schools and teach the little kids how to use the easier programs that we already learned.
>
> I did CORAL by the Beach and it was fun. It is interesting to see what little kids thought about computers and how they used computers. It was fun showing them how you use the Internet and they find it really cool. It was fun to show them how to do stuff when they get excited about it.
>
> I enjoyed working with the school sites. It was fun, but kind of frustrating, because the little kids would get rowdy and would talk a lot. Lots of times they would not listen and do things with the computer because they were so hyperactive but I learned how to handle this.
>
> I think it is very rewarding to be able to give back to the community especially to the younger-age kids because that's when they

> absorb more and need the peer support; even though there is a bit of an age difference, I found that it's both rewarding for us and the elementary age kids.
>
> A lot of the kids we worked with did not have good role models to look up to and when they see you, they look up to you as role models.

Focus group participants also discussed other aspects of their community involvement related to the Youth Institute and what they gained from these experiences. All participants reported positive changes including knowledge about working with the government and working with children as well as wanting to be more involved to make changes in their community.

> In the community we have a CORAL-wide picnic that the CORAL Youth Institute puts on for the rest of the CORAL after-school sites for the little kids. We did face painting and all of that stuff. And I think the little kids liked that.
>
> I have joined a civil rights group.
>
> I am part of the Long Beach Youth Philanthropy Board which gives out grants to youth-led programs throughout the community. I have also been on the 1st District Youth Council.
>
> I have been on the 1st District Youth Council and have been in the health leadership training, which I am going to graduate from on August 21.
>
> I volunteer for cultural events that happen during the year.

These findings from the focus groups are similar to other evaluation results. A study of three national organizations (*Boys and Girls Clubs of America, BGCA), Girls Incorporated, YMCA)* found that activities that included exposure to service, advocacy, involvement in government, and access to jobs and volunteer positions had better attendance than programs that did not include these activities. Youths participating in a national evaluation of *Learn and Serve America*, a school-based initiative involving students in volunteer service, found that 90% of their participants were satisfied with their service learning experiences. The

program also showed positive outcomes on civic attitudes and volunteer service involvement (The Center for Human Resources, 1999). The service-learning component combined with a project-based learning format appears to be an important factor that can promote youth development.

Importance of Personal Growth and Development

As encouraging as the evaluation findings were regarding the use of technology and service learning in this program, focus group data indicated other important implications. The data suggested that this technology program appeared to have the ability to do more than simply influence technology outcomes. Many participants mentioned the technology skills when asked about overall general knowledge and skills but the majority of participants talked about other things they learned about themselves and life skills that went beyond technology skills and knowledge. These included: developing leadership skills, making friends, getting along with others, speaking in front of others and voicing their opinions, balancing life and gaining the motivation to continue with their career goals. They also identified:

> Learning how to work in groups and deal with people was more important than learning about the technology. The technology projects helped a lot but I think I learned the most on how to interact with people and how to evaluate yourself too.
>
> I got the opportunity to earn money but more importantly I gained lots of new friends, people I can look up to, and maybe some parent figures. I also learned a lot about technology.
>
> I would encourage my friends to join CORAL because the technology and leadership skills work together with different people and different races.
>
> At first I came to CORAL for the money because there were not any other programs where they pay you to learn and teach you technology skills. However, at the end, I realized it wasn't just the money and technology skills. I really had fun and made a family with the friends that I met.

> I learned leadership skills and areas about myself such as selfishness and immaturity. It opened me up to the real world. I also learned about Web sites, cameras, editing, and storyboarding–a lot of technology.
>
> CORAL has been unlike anything else and I gained lots of life experience as well as experience with technology. I also learned people skills and got money on top of it.
>
> I gained a once-in-a-lifetime experience of learning technology, going to trips, learning about other peoples' culture and tons of fun stuff.

The participants in the program were often originally attracted to the Institute for the money and technology skills but gained much more in terms of other life skills. The technology component combined with a monetary stipend appears to be a strong initial attraction but the focus group data indicated that other gains come more from working in groups and with other participants. Thus, developing strategies to encourage these gains must be built into program planning that emphasizes technology and service learning.

CONCLUSIONS

Overall, the findings presented here provide support for a number of practice principles that should be implemented when considering how technology, combined with youth development principles, project-based, and service learning, can help high school youth develop a wide range of skills. However, it is important to note that a youth development program that utilizes technology appears to have the ability to do more than simply influence technology outcomes. The focus group data indicated that participants gained other skills beyond technology skills. Focus group participants were attracted to the Institute for the money and technology skills but gained much more in terms of their personal development, life and relationship-building skills. The technology and service learning component appears to promote youth development and community involvement. This youth development perspective suggests that teens are more likely to participate in out-of-school activities if they make connections between program participation and personal

benefits (Harvard Family Research Project, 2004). This is a key element to program success because research suggests that teens are less likely than younger children to stay involved in programs.

The initial program evaluation findings of the Youth Institute and literature discussed indicate a number of practice implications for practitioners designing youth development programs that utilize technology and service learning as well as the involvement of consumers in these programs. A key component of any youth development program is to better understand what features of the program are attractive to the youths and sustain their participation. Granger and Kane (2004) suggested that the field "build on examples that are demonstrable winners" (p. 52).

Finally, creative programming that incorporates project-based and service-learning components built around the use of technology seems to promote effective program activities. While it is unlikely every program could employ all the strategies discussed here, it is important that programs continue to utilize evaluation data to better understand the impact of key features in a youth development program emphasizing technology. Input from consumers will continue to make programs attractive to youths so they can reap positive benefits from participation.

The Youth Institute focus group participants' comments highlighted the importance of these benefits and the need for these programs:

> You gain a lot of advice and insight into life and you become more humanitarian.
>
> You gain life experience because this whole summer is like 20 years of life experience in one little package that you can just experience and be more prepared.
>
> The bigger the program gets, the more youth can get help over the year. The money and check is not really an issue. That was the one thing to bring us all together. The more the program expands, the more the merits are. The youth in Long Beach, especially the city of Long Beach, grow and become more powerful. We become more educated as a community so future generations will have a better chance to survive in the city because we have more educated youth.
>
> And at least more hope living in the ghetto.

Practitioner/Provider Questions

1. Do our participants and staff represent the community we are serving?
2. What activities do we have that promote bonding and cultural acceptance among our participants?
3. Does our technology training component incorporate project-based and challenging learning opportunities rather than merely focusing on teaching youth how to use a software program?
4. How can we incorporate opportunities for service learning and community involvement in our program?
5. In what ways does our program strategically build academic skills and encourage an interest in higher education while building career skills?
6. What evaluation activities are needed to identify the positive benefits of technology and service learning activities in youth development programs?

Consumer/Client Questions

1. Is the experience of participating in the program enjoyable and positive?
2. What changes and benefits occur as a result of their involvement?
3. What program components or activities contribute the most to their learning and development?

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