Evaluation of the Effects of the 2013 Long Beach YMCA Youth Institute Summer Program on Leadership and Technology Skills, Educational Attitudes and Positive Youth Development

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Methods

Data Collection

Self-report survey data was collected from all entering 2013 Long Beach High School Youth Institute (YI) Summer Program participants prior to the start and during the last week of the program. Two surveys were completed. The first was the Leadership Skills Inventory (Karnes & Chauvin, 2000), a standardized leadership instrument which measures nine areas of leadership skills. The second instrument, the YMCA Youth Institute Survey is a combined instrument measuring positive youth development, technology skills and educational attitudes. The positive youth development measures were created by the researchers specifically to evaluate this project based on The Toolkit for Evaluating Positive Youth Development (The Colorado Trust, 2004). The technology skill measures were designed to reflect the current YI technology curriculum. The three educational attitude measures were drawn from The School Attitude Assessment Survey – Revised Edition (McCoach & Siegle, 2003).

Sample

Seventy-five (93%) of the 81 Long Beach YI High School participants who completed the 2013 summer program had the consents and data needed for inclusion in these analyses As shown in Table 1, 52% were male. Latinos (55%) were the largest ethnic group, followed by Asian-American/Pacific Islanders (19%), African-Americans (13%), Multicultural (8%), European-American (4%) and Native-American (1%). Participants ranged in age from 13 to 17 years old, with the majority (82%) between 13 and 15. Almost all (94%) were in 8th, 9th or 10th grade when they started the summer program. Twenty (26%) had been in the middle school Youth Institute before entering the high school program. For the first time, Long Beach ran two sites and the cohort was split equally.

Table 1

Description of Summer 2013 Long Beach Youth Institute Participants

(N = 75)

	%	N
❖ Gender		
Male	52%	39
Female	48%	36
❖ Ethnicity		
Latino	55%	41
Asian American/Pacific Islander	19%	14
African-American	13%	10
Bi/Multicultural	8%	6
European-American	4%	3
Native-American	1%	1
❖ Age at Start of Program		
13	32%	24
14	25.5%	19
15	25.5%	19
16	16%	12
17	1%	1
❖ Grade		
8th (entering 9th)	39%	29
9th	31%	23
10th	24%	18
11th	5%	4
12th	1%	1
❖ Site		
St. Luke's	51%	38
Trinity	49%	37

Analysis

Measures

>*Leadership Skill Scales*

Nine types of leadership skills were measured including fundamentals of leadership (α = .85 to .89), written communication (α = .89 to .91), speech communication (α = .89 to .90), character-building (α = .87 to .88), decision-making (α = .84 to .85), group dynamics (α = .90 to .93), problem-solving (α = .80 to .87), personal skills (α = .89 to .90), and planning skills (α = .90 to .94). Participants rated themselves on a scale ranging from 0 "Almost Never" to 3 "Almost Always." Higher scores indicated better self-perceived skills. Changes in skills were investigated using paired-samples t-tests.

>*Educational Attitude Scales*

Three educational attitudes were measured including academic self-perceptions (α = .86), goal valuation (α = .93 to .96), and motivation/self-regulation (α = .92). The academic self-perception scale consisted of six items that measured the perception/confidence that students had in their own skills. Questions included, "I feel that I can learn new ideas quickly" and "I feel intelligent." The goal valuation scale consisted of six items that measured how much students valued education. Questions included, "It is important to me to get good grades" and "I want to do my best in school." The motivation/self-regulation scale consisted of 10 items and measured how self-motivated students were and how good they were at self-monitoring. Questions included, "I use a variety of strategies to learn new material in high school" and "I am a responsible student." Participants rated their agreement with each statement on a scale ranging from 1 "Strongly Disagree" to 7 "Strongly Agree." Higher scores indicated more positive attitudes. Changes in attitudes were investigated using paired-samples t-tests.

Positive Youth Development Scales

The cultural competence scale (α = .76 to .80) consisted of seven items measuring respect for and comfort with their own and others' cultures. Questions included, "I have respect for teens of other cultures, races or ethnic groups" and "I feel connected to and proud of my own culture." The life skills scale (α = .77 to .82) consisted of 11 items measuring proficiencies that allow youth to transition into and achieve successful adulthood. Questions included, "I am good at making friends" and "I make good decisions."

The positive core value scale (α = .70 to .77) consisted of seven items measuring caring, empathy, integrity, honesty, responsibility, equality and fairness. Questions included, "I am good at taking responsibility for my actions," and "I am good at speaking up for people who have been treated unfairly. The sense of self scale (α = .76 to .78) consisted of six items measuring how youth view themselves and their abilities to cope with the basic challenges of life. Questions included, "I can handle whatever comes my way" and "I feel that I can make a difference."

The social competency/responsible choices scale (α = .59 to .71) consisted of six items measuring good behavior, hard work, personal responsibility and fairness. Questions included, "I can identify the positive and negative consequences of my behavior" and "I think I should work to get something if I really want it." The community involvement scale (α = .74 to .81) consisted of four items measuring feelings of connectedness to the community and volunteer activities. Questions included, "I feel a strong connection to my community" and "I feel good about myself because I help others."

The positive adult relationships scale (α = .87 to .90) consisted of three items measuring the amount of perceived social support received from adults outside of the family. Questions included, "There is a caring adult outside my family in my life who is around when I need

him/her" and "There is a caring adult outside of my family who I can talk to about my problems."

Results

Leadership Skills

As shown in Table 2, these summer YI participants self-reported significantly higher skill levels in all nine leadership skill areas including, fundamentals of leadership, t (74) = 5.12, $p < .05$; written communication, t (74) = 5.76, $p < .05$; speech communication, t (74) = 6.91, $p < .05$; character-building, t (73) = 5.13, $p < .05$; decision-making, t (73) = 5.74, $p < .05$; group dynamics, t (74) = 6.37, $p < .05$; problem-solving, t (74) = 3.30, $p < .05$; personal, t (74) = 5.70, $p < .05$; and planning skills, t (74) = 4.90, $p < .05$, at the end of the summer program.

Table 2

Summer 2013 Long Beach YI Participant Report of Changes in Leadership Skills

Skills	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
Fundamentals of Leadership	2.27	.61	75	2.56	.43	.29**
Written Communication	2.04	.64	75	2.39	.50	.35**
Speech Communication	2.03	.57	75	2.38	.47	.34**
Character Building	2.44	.39	74	2.65	.31	.21**
Decision-Making	2.36	.46	74	2.62	.35	.26**
Group Dynamics	2.30	.50	75	2.58	.37	.29**
Problem-Solving	2.37	.58	75	2.56	.41	.19**
Personal	2.38	.39	75	2.64	.31	.26**
Planning	2.26	.54	75	2.54	.38	.29**

**$p < .05$

Technology Skills

Technology skills were measured by participant self-report of their ability to use 13 types of technology. The response categories ranged from 1 "No Skills" to 4 "Excellent Skills."

Higher scores indicated greater skill level. As shown in Table 3, these youth reported significantly higher skills in all of the technology skills including, sending email, $t(73) = 4.84$, $p < .05$; Internet use, $t(72) = 3.54$, $p < .05$; web design, $t(73) = 7.49$, $p < .05$; using word processing software, $t(73) = 5.92$, $p < .05$; using data processing software, $t(73) = 6.92$, $p < .05$; digital video filming, $t(74) = 10.26$, $p < .05$; using computers to complete school assignments, $t(73) = 4.66$, $p < .05$; digital music creation, $t(72) = 10.31$, $p < .05$; presentation software, $t(73) = 9.21$, $p < .05$; digital video editing software, $t(74) = 7.61$, $p < .05$; graphic design, $t(73) = 9.72$, $p < .05$; digital photography, $t(74) = 8.69$, $p < .05$; and animation, $t(74) = 5.45$, $p < .05$, at the end of the summer program.

Table 3

Summer 2013 Long Beach YI Participant Report of Changes in Technology Skills

Technology	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
Email use.	2.97	.96	74	3.38	.79	.40**
Internet use (visit websites/surf web).	3.55	.71	73	3.79	.44	.25**
Web design (construction, layout, domain registration, maintenance, applications, Dreamweaver, Photoshop, HTML, peripheral configuration).	2.03	.96	74	2.84	.70	.81**
Word processing software (Word) to write reports and/or letters.	3.08	.95	74	3.66	.56	.58**
Data processing software (Excel) for databases or spreadsheets.	1.92	1.00	74	2.74	.99	.82**
Digital Video Filming (Camera, lighting, etc.)	2.16	1.09	75	3.13	.83	.97**
Using the computer to complete school assignments.	3.42	.72	74	3.78	.45	.36**
Digital music creation (GarageBand, Reason, Logic Pro).	2.03	1.05	73	3.23	.79	1.20**
Presentation software (Powerpoint, Keynote, Inspiration).	2.41	1.11	74	3.50	.65	1.09**
Digital Video Editing (Final Cut Pro, iMovie, After Effects, etc.).	2.04	1.08	75	2.99	.91	.95**
Graphic Design (Photoshop, Illustrator, InDesign).	2.09	1.14	74	3.24	.68	1.15**
Digital Photography (DSLR camera, lighting, memory card, Photoshop, etc.).	2.11	1.10	75	3.05	.80	.95**
Animation (Cinema 4D, After Effects, Stop Motion).	1.59	.89	75	2.27	1.00	.68**

**$p < .05$

Educational Attitudes

As shown in Table 4, participants self-reported significant improvements on all three educational attitude scales including, academic self-perception, t (73) = 5.50, $p < .05$; goal valuation, t (73) = 3.31, $p < .05$; and motivation/self-regulation, t (73) = 7.53, $p < .05$, at the end of the summer program.

Table 4

Summer 2013 Long Beach YI Participant Report of Changes in Educational Attitudes

Educational Attitude Scale	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
Academic Self-Perceptions	5.37	1.02	74	5.87	.82	.51**
Goal Valuation	6.33	1.11	74	6.73	.53	.40**
Motivation/Self-Regulation	5.20	1.11	74	5.90	.88	.71**

**$p < .05$

Positive Youth Development

As shown in Table 5, at the end of the summer, participants self-reported significant improvement on all of the positive youth development measures including, cultural competence, t (74) = 4.05, $p < .05$; life skills, t (74) = 4.68, $p < .05$; positive core values, t (73) = 4.54, $p < .05$; sense of self, t (73) = 3.41, $p < .05$, social competency/personal responsibility, t (74) = 4.51, $p < .05$, community involvement, t (70) = 6.13, $p < .05$; and caring adult relationships, t (69) = 3.79, $p < .05$, at the end of the summer program.

Table 5

Summer 2013 Long Beach YI Participant Report of Changes in Positive Youth Development
Scales

Development Scale	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
Cultural Competence	3.60	.37	75	3.76	.32	.16**
Life Skills	3.22	.36	75	3.43	.35	.21**
Positive Core Values	3.32	.39	74	3.53	.35	.21**
Sense of Self	3.27	.46	74	3.46	.41	.19**
Social Competency/Personal Responsibility	3.43	.34	75	3.64	.32	.20**
Community Involvement	2.93	.55	71	3.28	.55	.35**
Caring Adult Relationships	3.22	.82	70	3.57	.57	.35**

**p < .05

Conclusions

Overall, the results of the 2013 Long Beach High School Youth Institute Summer
Program were extremely positive since significant improvements were found on every item or
scale in every domain hypothesized to be influenced by program participation. These findings
represent a substantial improvement over those found last year and, in most years. Although the
absence of a control group makes it difficult to definitively conclude that these changes were
completely the result of program participation, it is unlikely that such changes would occur
without some type of intervention. At the end of the summer, these youth rated themselves
significantly higher on all nine (100%) of the leadership skills measured. Thus, it appears that
program participation helped youth to develop a diverse range of leadership skills that should

prove beneficial to them both in school, the larger community, and in the future. Many of these skills should also prove useful to participants as they enter the world of work.

Similarly, these youth self-reported significantly better technology skills on all of the 13 skills measured here, including e-mail, Internet use, web design, word processing, data processing, digital video filming, use of computer to complete school assignments, digital music creation, presentation software, digital video editing, graphic design, digital photography, and animation. These findings suggest that the summer program, with its intensive technology focus, was able to teach participants a wide variety of high-end digital media skills. This is encouraging since people with strong technological skills are becoming more highly valued in the workforce (Baron, 2002). It is worth noting that the summer curriculum and projects were able to further enhance the skills even among youth who had participated in similar activities during the middle school program. Thus, it appears that the YI curriculum has evolved to create a ladder of extended learning and skill development that continues to build skills over time.

Another anticipated outcome of the YI is improved educational attitudes, although this area has, in the past, been found to be more difficult for the summer program to influence. In contrast, this year, participants reported significant improvements in academic self-perceptions (confidence in their skills, goal valuation [perceived value of education], and motivation/self-regulation). This is important given research has indicated that higher academic self-perceptions are both related to, and predictive of, better academic outcomes (Erkman, Caner, Sart, Borkan & Sahan, 2010; Pershey, 2010). Similarly, both goal valuation and motivation/self-regulation have been found to be related to higher levels of achievement among high school students (Suldo, Shaffer & Shaunessy, 2008; McCoach & Siegle, 2003). Thus, these improvements may help participants to achieve better academically in the coming years. While these gains are positive, it will be important for YI and College Readiness staff to continue to support academics and

expose youth to higher education in the year-round program to further increase the likelihood of positive academic achievement, high school graduation, and entry into higher education.

The YI is designed to incorporate positive youth development strategies into all aspects of the program since participation in youth development programs has been shown to enhance academic success (Hall, Yohalem, Tolman & Wilson, 2003), while reducing involvement in adolescent problem behaviors (Meltzer, Fitzgibbon, Leahy & Petsko, 2006; Roffman, Pagano & Hirsch, 2001). The findings here indicate that the program was quite successful in promoting positive youth development as participants evidenced significant gains in all seven areas. It appears that program involvement helped participants to develop protective factors that should reduce the likelihood of future involvement in problem behaviors. The increase in positive adult role models should also prove beneficial as having such relationships has also been shown to predict more successful adolescent development (Serido, Borden & Perkins, 2011; DuBois, Portillo, Rhodes, Silverthorn & Valentine, 2011).

In conclusion, the program appears to have increased the social and interpersonal competence and technology skills of youth, all of which have been found to be useful in higher education and the workforce (Lippman, Atienza, Rivers & Keith, 2008; Warschauer & Matuchniak, 2010). The results of this evaluation provide additional evidence that the outcomes hypothesized in the YI model and found in Long Beach can be successfully replicated at other sites. Staff are to be congratulated for their efforts which appeared to help youth develop and enhance skills that are critical for positive development, academic achievement, and career success.

References

Baron, P. E. (2002). Meeting the need for scientists, engineers, and an educated citizenry in a technological society. Princeton, JN: Policy Information Center Report, Educational Testing Service. Retrieved from: http:ets.org/research/pic/meetingneed.pdf

DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12*, 57-91.

Erkman, F., Caner, A., Sart, H., Borkan, B., & Sahan, K. (2010). Influence of perceived teacher acceptance, self-concept, and school attitude on the academic achievement of school-age children in Turkey. *Cross-Cultural Research, 44*, 295-309.

Hall, G., Yohalem, N., Tolman, J., & Wilson, A. (2003). *How afterschool programs can most effectively promote positive youth development as a support to academic achievement: A report commissioned by the Boston after-school for all partnership.* Washington, DC: National Institute on Out-of-School Time.

Karnes, F. A. & Chauvin, J. C. (2000). *Leadership development program manual.* Scottsdale AZ: Gifted Psychology Press, Inc.

Lippman, L., Atienza, A., Rivers, A., & Keith, J. (2008). *A developmental perspective on college & workplace readiness.* Child Trends. Retrieved from: http://www.childtrends.org/Files/ Child_Trends-2008_09_15_FR_ReadinessReport.pdf

McCoach, D. B., & Siegle, D. (2003). The school attitude assessment survey-revised: A new instrument to identify academically able students who underachieve. *Educational and Psychological Measurement, 63*, 414-429.

Meltzer, I. J., Fitzgibbon, J. J., Leahy, P. J., & Petsko, K. E. (2006). A youth development program: Lasting impact. *Clinical Pediatrics, 45*, 655–660.

Pershey, M. G. (2010). A comparison of African American students' self-perceptions of school competence with their performance on state-mandated achievement tests and normed tests of oral and written language and reading. *Preventing School Failure, 55*, 53-62.

Roffman, J. G., Pagano, M. E., & Hirsch, B. J. (2001). Youth functioning and experiences in inner-city after-school programs among age, gender, and race groups. *Journal of Child and Family Studies, 10*, 85-100.

Serido, J., Borden, L. M., & Perkins, D. F. (2011). Moving beyond youth violence. *Youth & Society, 43*, 44-63.

Suldo, S. M., Shaffer, E. J., Shaunessy, E. (2008). An independent investigation of the validity of the school attitude assessment survey-revised. *Journal of Psychoeducational Assessment, 26*, 69-82.

The Colorado Trust. *The after-school initiative's toolkit for evaluating positive youth development.* Denver, CO: The Colorado Trust, 2004.

Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education, 34,* 179-225.