

**Evaluation of the Effects of the 2008 Long
Beach YMCA High School Youth Institute
Summer Program on Leadership Skills,
Technology Skills, Educational Attitudes and
Positive Youth Development**

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Methods

Data Collection

Self-report survey data was collected from all entering 2008 YMCA Youth Institute Summer Program participants prior to the start and on the last day 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 instrument has been shown to have strong reliability and validity. The second instrument, The YMCA Youth Institute Survey is a combined instrument measuring positive youth development (cultural competency, life skills, positive core values, sense of self, social competency-responsible choices, community involvement, and positive adult relationships), technology use, technology competence, 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 use and competence measure was originally created by Dr. Jo Ann Regan to evaluate this project, however, the measure was revised this year to reflect the current technology curriculum at the Youth Institute. The three educational attitude measures (self-perceptions, goal valuation, and motivation/self-regulation) came from The School Attitude Assessment Survey – Revised Edition (McCoach & Siegle, 2003). This instrument has been shown to have strong reliability and validity.

Sample

Forty-five (82%) of the 55 YMCA High School Youth Institute participants who completed the summer program had both pre- and post-test data and were included in these analyses. As shown in Table 1, these program participants ranged from 13 to 17 years of age. The majority were 13 to 15 (80%). Fifty-six percent were female. Latinos (53%) were the largest ethnic group, followed by Asian-American/Pacific Islanders (20%), African-Americans

(16%), Bi-racial/Mixed ethnicities (7%), and European Americans (4%). Over two-thirds (66%) were in 8th or 9th grade when they started the High School Youth Institute. Twelve (27%) youth had participated in the YMCA Middle School Youth Institute before entering the high school program.

Table 1
Description of Summer 2008 High School Youth Institute Participants
(N = 45)

	%	N
❖ Age at Start of Program		
13	31%	14
14	22%	10
15	27%	12
16	18%	8
17	2%	1
❖ Gender		
Male	44%	20
Female	56%	25
❖ Ethnicity		
Latino	53%	24
Asian American/Pacific Islander	20%	9
African-American	16%	7
Bi/Multicultural	7%	3
European-American	4%	2
❖ Grade		
8 th	44.5%	20
9 th	22%	10
10 th	27%	12
11 th	4.5%	2
12 th	2%	1

Analysis

Leadership Skills

Nine types of leadership skills were measured including fundamentals of leadership ($\alpha = .89$ to $.93$), written communication ($\alpha = .91$ to $.92$), speech communication ($\alpha = .89$ to $.93$), character-building ($\alpha = .93$ to $.94$), decision-making ($\alpha = .87$ to $.89$), group dynamics ($\alpha = .93$ to $.94$), problem-solving ($\alpha = .88$ to $.89$), personal skills ($\alpha = .92$ to $.94$), and planning skills ($\alpha = .93$ 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 t-tests.

Educational Attitude Scales

Three educational attitudes were measured including academic self-perceptions ($\alpha = .70$ to $.86$), goal valuation ($\alpha = .88$ to $.92$), and motivation/self-regulation ($\alpha = .92$). The academic self-perception scale consisted of 6 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 6 items that measured how much students valued a task. 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 t-tests.

Positive Youth Development Scales

The cultural competence scale ($\alpha = .71$ to $.79$) consisted of 10 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 pride for my own culture, race or ethnic group." The life skills scale ($\alpha = .74$ to $.75$) consisted of 11 items measuring proficiencies that allow youth to transition into and achieve successful adulthood. Questions included "I am making friends" and "I make good decisions."

The positive core value scale ($\alpha = .74$ to $.75$) consisted of five 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 ($\alpha = .63$ to $.72$) consisted of 5 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 ($\alpha = .64$ to $.74$) consisted of 6 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 ($\alpha = .80$ to $.82$) consisted of 5 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 ($\alpha = .91$ to $.96$) consisted of 4 items measuring 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 in my life who cares about my feelings.”

Results

Leadership Skills

As shown in Table 2, these Youth Institute teens self-reported significant improvements in all of the nine areas of leadership including Fundamentals of Leadership Skills, $t(42) = 4.88, p < .05$, Written Communication Skills, $t(44) = 5.29, p < .05$, Speech Communication Skills, $t(44) = 5.58, p < .05$, Character Building, $t(44) = 3.77, p < .05$, Decision-Making Skills, $t(43) = 4.48, p < .05$, Group Dynamic Skills, $t(44) = 4.93, p < .05$, Problem-Solving Skills, $t(44) = 4.94, p < .05$, Personal Skills, $t(44) = 4.36, p < .05$, and Planning Skills, $t(44) = 5.05, p < .05$. The greatest gains were found in problem-solving, speech communication, and written communication skills.

Table 2
Summer 2008 YI Participant Report of Changes in Leadership Skills

Skills	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
Fundamentals of Leadership	2.08	.64	43	2.42	.58	.39**
Written Communication	1.86	.64	45	2.29	.57	.43**
Speech Communication	1.81	.66	45	2.24	.52	.43**
Character Building	2.28	.51	45	2.53	.50	.26**
Decision-Making	2.20	.47	44	2.52	.43	.32**
Group Dynamics	2.12	.52	45	2.42	.46	.30**
Problem-Solving	1.98	.59	45	2.44	.56	.46**
Personal	2.28	.50	45	2.53	.43	.26**
Planning	2.04	.56	45	2.44	.45	.39**

** $p < .05$

Technology Use

Technology use was measured by participants' self-report of their frequency of use of 13 types of technology. Participants rated themselves on a scale ranging from 1 "Never" to 4 "Daily." Higher scores indicated greater frequency of use. As shown in Table 3, study participants reported significantly more frequent use of the computer at home and school, $t(44) = 3.71, p < .05$, sending email, $t(44) = 3.97, p < .05$, accessing the Internet, $t(43) = 4.77, p < .05$, creating web pages, $t(44) = 7.14, p < .05$, creating graphic designs with computer software, $t(44) = 6.22, p < .05$, using data processing software applications for databases/spreadsheets, $t(43) = 5.68, p < .05$, using digital video equipment, $t(44) = 6.27, p < .05$, participating in Internet chat rooms/discussions boards $t(44) = 3.47, p < .05$, using digital music software $t(44) = 6.26, p < .05$, using presentation software $t(44) = 5.43, p < .05$, and using digital editing software $t(43) = 4.73, p < .05$ at the end of the summer program. Participants also reported somewhat more frequent use of word processing software applications to write text, $t(44) = 1.88, p < .10$, at the end of the summer program. The greatest gains were found in the use of digital music software, creating graphic designs with computer software and code applications, and creating web pages.

Table 3

Summer 2008 YI Participant Report of Changes in Technology Use

Technology Use	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
I currently use the computer at home and school.	3.18	.72	45	3.56	.62	.38**
I send email.	2.47	1.04	45	3.09	1.04	.62**
I access the Internet (websites, surf the web).	3.14	.79	44	3.70	.55	.57**
I create web pages.	1.13	.40	45	2.00	.74	.87**
I create graphic designs with computer software and code applications (HTML, Dreamweaver, etc.).	1.56	.87	45	2.44	.84	.89**
I use word processing software applications to write text.	2.78	.88	45	3.00	.77	.22*
I use data processing software applications for databases or spreadsheets.	1.57	.76	44	2.36	.94	.79**
I use digital video equipment (cameras/video).	2.24	.88	45	3.09	.79	.84**
I participate in Internet chat rooms/discussion boards/listservs.	2.09	1.16	45	2.67	1.11	.58**
I use the computer to complete school assignments.	2.93	.86	45	2.91	.79	.02
I use digital music software (GarageBand, Reason, Logic Pro).	1.76	.96	45	2.87	.92	1.11**
I use presentation software (Powerpoint, Keynote, Inspiration).	1.98	.92	45	2.82	.78	.84**
I use digital editing software (iMoive, Final Cut).	1.66	.94	44	2.48	.95	.82**

**p<.05

*p < .10

Technology Competence

Technology competence was measured by participants' self-report of knowledge in nine different areas. Participants rated themselves on a scale ranging from 1 "No knowledge" to 4 "Excellent knowledge." As shown in Table 4, these program participants reported significant

improvement in all competence areas including using input devices, $t(44) = 4.11, p < .05$, using a variety of media and technology resources, $t(44) = 6.82, p < .05$, working cooperatively with others to use technology to produce and share information, $t(44) = 2.78, p < .05$, creating multimedia products, $t(44) = 7.19, p < .05$, using technology tools to locate, evaluate, and collect information from a variety of sources, $t(43) = 6.45, p < .05$, using technology tools for managing and communicating personal/professional information, $t(44) = 6.74, p < .05$, and using a variety of media and formats to communicate information and ideas effectively to multiple audiences, $t(43) = 4.66, p < .05$. The greatest gains were found in creating multimedia products, using technology tools to locate, evaluate, and collect information, and using technology tools for managing personal/professional information.

Table 4

Summer 2008 YI Participant Report of Changes in Technology Competencies

Technology Competence	Before Summer			End of Summer		
	Mean	SD	N	Mean	SD	Difference
I can use input devices (mouse, keyboard, remote control) and output devices (monitor, printer) to successfully operate computers, VCRs, audiotapes, etc.).	3.07	.94	45	3.51	.59	.44**
I can use a variety of media and technology resources (word processing, presentation, graphic design software) to create presentations both inside and outside of the classroom.	2.53	.94	45	3.31	.67	.78**
I can work cooperatively with others to use technology to produce and share information.	2.96	.88	45	3.33	.52	.38**
I can create multimedia products (digital videos, movies, magazines, newsletters, invitations) with support from staff or student partners.	2.38	1.11	45	3.51	.55	1.13**
I can use technology tools to locate, evaluate, and collect information from a variety of sources.	2.32	.96	44	3.23	.64	.91**
I can use technology tools to process data and report results.	2.11	.87	44	2.80	.63	.68**
I can use technology tools for managing and communicating personal/professional information (finances, schedules, addresses, correspondence).	1.80	.81	45	2.69	.76	.89**
I can use a variety of media and formats to communicate information and ideas effectively to multiple audiences.	2.02	.90	44	2.82	.90	.79**

** $p < .05$ *Educational Attitudes*

As shown in Table 5, the Youth Institute teens reported significant improvement in academic self-perceptions, $t(44) = 2.58, p < .05$, and somewhat of an improvement in motivation/self-regulation, $t(44) = 1.95, p < .10$.

Table 5
 Summer 2008 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	5.49	.78	45	5.73	.85	.25**
Goal Valuation	6.54	.55	45	6.59	.58	.05
Motivation/Self-Regulation	5.39	.89	45	5.64	.77	.25*

**p<.05

*p < .10

Positive Youth Development

As shown in Table 6, teens who participated in the 2008 YMCA Youth Institute Summer Program self-reported significant improvement in all but one of the positive youth development areas at the end of the summer program. Positive, significant differences were found in cultural competence, $t(44) = 4.12, p < .05$, life skills, $t(44) = 4.09, p < .05$, positive core values $t(43) = 3.01, p < .05$, social competency/personal responsibility, $t(43) = 2.18, p < .05$, community involvement, $t(44) = 3.65, p < .05$, and caring adult relationships, $t(44) = 2.91, p < .05$.

Table 6

Summer 2008 YI Participant Report of Changes in Positive Youth Development Scales

Development Scale	Before Summer			End of Summer		Difference
	Mean	SD	N	Mean	SD	
Cultural Competence	3.46	.38	45	3.66	.30	.20**
Life Skills	3.09	.34	45	3.31	.33	.21**
Positive Core Values	3.30	.44	44	3.49	.34	.19**
Sense of Self	3.25	.46	44	3.37	.43	.11
Social Competency/Personal Responsibility	3.41	.39	44	3.52	.33	.11**
Community Involvement	2.83	.62	45	3.10	.51	.27**
Caring Adult Relationships	3.13	.86	45	3.52	.67	.39**

**p<.05

Conclusions

Overall, the evaluation results of the 2008 Youth Institute Summer Program were extremely positive. Participants self-reported significant or approaching significant growth in almost every (93%) area measured in these analyses. Participants reported significant improvement in all nine leadership skill areas. This suggests the summer wilderness retreat and the project-based learning experiences helped participants to develop a wide range of skills that should enable them to become future leaders. It is also worth noting that the largest gains were found in the areas of problem-solving, and speech and written communication skills. These skills should be particularly useful both in school and as they enter the work force as many of the items measured by this instrument have been identified as critical 21st century work place skills (The Partnership for 21st Century Learning Skills, 2003).

These Youth Institute participants also self-reported significantly more technology use on 11 (85%) of the 13 types of use measured and somewhat of an improvement on one of the remaining items, and significant improvement in all eight areas of technology competence. The only area that did not approach or reach significance was on using the computer to complete school assignments which is not unexpected given that these youth were not enrolled in school during the summer program. Thus, it appears that participation in the Youth Institute, as hypothesized, exposed these youth to a wide variety of technology applications and helped them to gain a broad array of technology skills that should prove valuable to them in their future academic and career endeavors. These findings represent a great improvement over growth related to technology use and competence over the past two years and happened in spite of the fact that 27% of these youth had been exposed to similar technology during their time in the Middle School Youth Institute. It appears that High School Youth Institute staff was able to modify the summer curriculum, as suggested in prior evaluation reports, so that even those participants entering with already strong technology skills were able to further develop and hone their technology competence. These findings provide some support for the viability of a “technology learning continuum” as envisioned by the YMCA.

Another anticipated outcome of the Youth Institute is improved educational attitudes. The findings here suggest that program participation helped these youth to develop significantly more positive academic self-perceptions as well as somewhat more motivation and self-regulation. It is possible that these better educational attitudes may contribute to improved academic achievement. It will be interesting to see if these changes remain after these youth actually return to school, or if they are related to improved academic performance at the end of the next school year.

This was the first year that the effects of the Youth Institute on positive youth development were explored quantitatively. This is a critical program component as the Youth Institute, although focused primarily on technology, has been carefully designed to incorporate positive youth development strategies into all aspects of the program. Thus, it is very encouraging that participants reported significant improvements in cultural competence, life skills, positive core values, social competence/personal responsibility, community involvement and caring adult relationships. These findings suggest that program participation has, as hypothesized, contributed to improved youth development in many and varied areas which should help these youth to do well while avoiding involvement in negative behaviors.

In conclusion, the results of this evaluation strongly suggest that the Youth Institute is positively influencing youth who participate in the summer program in all of the key areas hypothesized by the program model; leadership, technology, educational attitudes, and positive youth development. These results represent a substantial improvement on those from the past two years and suggest that some of the program modifications made by staff this year have strengthened the program.

References

- Karnes, F. A. & Chauvin, J. C. (2000). *Leadership development program manual*. Scottsdale AZ: Gifted Psychology Press, Inc.
- 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* (3), 414-429.
- The Colorado Trust. *The after-school initiative's toolkit for evaluating positive youth development*. Denver, CO: The Colorado Trust, 2004.
- The Partnership for 21st Century Learning Skills. *Learning for the 21st century: A report and mile guide for 21st century skills*. Washington DC: Partnerships for 21st Century Skills, 2003.
Retrieved from: http://www.21stcenturyskills.org/downloads/P21_Report.pdf.