The Sonoma County Youth Ecology Corps (SCYEC) is a jobs, workforce training and ecosystem education program which employs youth while teaching them about environmental stewardship, and the opportunity to contribute to their community.

Visit SCYEC online at http://youthecologycorps.org/, http://www.youtube.com/scyec, and Facebook!
CONTENTS

Executive Summary .......................................................... Page 1
Logic Model ........................................................................... 2
Literature Review ................................................................... 3
Evaluation Methods ............................................................. 4
Program Design ...................................................................... 5
  Youth Needs
  Funding
  Hire and Train Crew Leaders and Crews
  2011 Youth
  Crew Work and Individual Placements
  Kick-Off Event
  Exposure to a Work Environment
  Ecology Work
  Environmental Education
  Opportunity Fair
  Cross-Sector Collaboration

Short-Term Results for Youth ............................................... 13
  Safety
  Improved Work Skills
  Relationship Building
  Youth Income
  Planning for the Future
  Youth Satisfaction

Short-Term Results for the Environment ............................. 24
  Increased Environmental Knowledge
  Completed Ecology Work

Short-Term Results for the Community ................................ 27
  Exposure to Community Service

Discussion ............................................................................... 28
  Needed
  Successful
  Sustainable

Recommendations ............................................................... 30
  Program Design
  Evaluation

Appendices ............................................................................. 34
  Youth Accomplishments
  Literature Review
  References Consulted During the Evaluation
  Information Collected from Each Youth
  Content Analysis
  Statistical Analysis
EXECUTIVE SUMMARY

In 2011, 192 youth were employed in the Sonoma County Youth Ecology Corps (SCYEC). The youth worked for eight weeks on environmental restoration throughout Sonoma County. Youth learned about the ecosystem through an environmental education program, received job-readiness training, and received access to a lifelong online career assessment program. The SCYEC Logic Model on the following page illustrates SCYEC needs, resources, strategies, short-term results, and long-term impacts.

This evaluation identified the following short-term results:

For Youth
The 2011 SCYEC achieved quantifiable and positive short-term results for youth in the areas of safety, work skills, relationships, income, and planning for the future. Furthermore, youth participants were highly satisfied with their SCYEC experience. A primary objective of the SCYEC is to prepare youth for further employment. And, information collected during the 2011 SCYEC program clearly suggests that youth made significant improvements in their work skills through the summer.

“... now I know I’m capable of being hired and doing a good job.”

For the Environment
Youth work benefited the local environment. Collectively, youth planted 7,402 plants, harvested 800 crops, removed 13,300 pounds and 1,598 cubic yards of debris, maintained 13.3 miles of waterway, shredded 628 cubic yards of biomass, and maintained 13.5 miles of trails.

“We cleaned up the creek to make it a sufficient habitat for animals.”

For the Community
Youth were exposed to the value and joy of community service. One youth called this “pride work.” For the youth, community service and environmental stewardship were clearly linked. They expressed a great deal of pride about helping the environment.

“We spread new mulch... all the neighbors were very thankful for our work.”

The SCYEC Leadership Team concludes that the SCYEC is needed, successful, and sustainable. Based on this evaluation, and with a desire to continually improve the SCYEC, the Leadership Team makes 12 recommendations related to program design and the evaluation.
SCYEC LOGIC MODEL

**NEEDS**

- More Youth with Needs than there is Capacity to Serve
- Disconnected Youth
- High Youth Unemployment
- First Generation of Youth
- Less Fit than Parents

**RESOURCES**

- Youth

**STRATEGIES**

- Exposure to Work Environment
- Crew Work and Individual Placements
- Physical Activity
- Mentoring and Role Modeling
- Referrals to Community Resources

**SHORT TERM RESULTS**

- Safety
- Improved Work Skills
- Relationship Building
- Improved Income for Families
- Planning for the Future
- Youth Satisfaction

**LONG TERM IMPACTS**

- Increased Graduation Rates
- Increased Participation in Post-Secondary Education
- Increased unsubsidized Employment
- Reduced Criminal Behavior
- Reduced Obesity

**ENVIRONMENT**

- Multiple Conservation Projects
- Summer Work and Maintenance for Streams

**COMMUNITY**

- Disparate Resources

**FUNDING**

- Funding
- Materials and Equipment
- Paid Staff
- Expertise and Commitment
- Volunteers
- Project Hosts

**EXTRA**

- Renewable growth of work to be done
- Environmental Education
- Ecology Work
- Hire and Train Crew Leaders and Crews

**SHORT TERM RESULTS**

- Increased Environmental Knowledge
- Completed Ecology Projects

**LONG TERM IMPACTS**

- Healthy Streams
- Increased Employment in Resource Conservation

- Exposure to Community Service

- Workforce Readiness
- Community Support for Youth Development
- Reduced Crime

For more information visit [http://youthecologycorps.org/](http://youthecologycorps.org/)
LITERATURE REVIEW

Because supporting and developing work skills in youth is so important to the economic vitality of communities, researchers seek to understand the most effective strategies and the outcomes they achieve. For instance, does youth employment have an effect on a youth’s value system about work and school? What skills are gained through youth employment, and how are these skills transferable to school and/or future work? Does working in and learning about the environment have positive outcomes? A brief review of the literature identifies six key strategies that appear to be the most effective in youth employment programs.

• Career Academies
• Job Search
• Mentoring
• Skill Building
• Characteristics of Effective Service Providers

Research about effective youth employment strategies has identified the following short-term results and long-term impacts for youth, their families, and the community.

**Short-Term Results**
- Improved work readiness
- Improved academic attainment
- Positive impact on future education and career goals
- Leadership development
- Improved financial management
- Youth appreciation

**Long-Term Impacts**
- Increased employment
- Improved income
- Reduced criminal behavior
- Reduced teen pregnancy rates
- Reduced substance abuse
- Successful independent living
- Family stability

These positive impacts may not be experienced by all youth equally. Researchers have found that the following youth and program characteristics can influence the impact of a strategy and the success of a youth.

• Gender
• Age
• Race/Ethnicity
• Grades prior to the youth program
• Youth readiness for change
• Prior criminal justice involvement
• Stability of program staff

The appendices include the complete discussion of the research and a list of sources reviewed.
EVALUATION METHODS

With this evaluation, the SCYEC, sought to understand program implementation and impacts -- empirically rather than anecdotally. The evaluation was designed to be a single source of facts about the youth served, program fidelity to the design, and the short-term impacts of the program for the youth, the environment, and the community. Information from the evaluation will be used to inform future program design and business practices and will also be used in a variety of marketing and fundraising opportunities, as necessary and appropriate. The SCYEC also intends to understand long-term impacts through future longitudinal evaluation work. Audiences for the 2011 evaluation are:

- The Sonoma County Board of Supervisors
- The Sonoma County Water Agency
- The Sonoma County Workforce Investment Board and Youth Council
- The Sonoma County Human Services Department
- The Sonoma County Office of Education
- Past and future non-profit organizations who are contracted to provide the services to youth
- Other past and future funders
- Past and future host sites

The research questions addressed by this evaluation were:

- Does the SCYEC achieve the anticipated short-term outcomes?
- Do the achieved short-term outcomes vary by youth demographics (age, gender, race/ethnicity, prior SCYEC experience, job assignment, special needs)?
- What lessons from 2011 can be applied to the program in future years?

Information to answer these questions was collected from youth, crew leaders, youth providers, and host sites using surveys, youth skills assessments, and focus groups.

The evaluation was implemented by the Human Services Department (HSD) Information Integration Division (I2). Staff from HSD, the Water Agency, New Ways to Work, and the Office of Education, and youth providers participated in the evaluation design, reviewed the data collection instruments, reviewed the data analysis, and developed the discussion and recommendations. I2 conducted data entry, cleaning, analysis, and developed the report. More information about the evaluation methodology is available in the appendices.
PROGRAM DESIGN

Research and local experience inform the design of the SCYEC. The SCYEC Logic Model (on page 2) illustrates the needs the SCYEC intends to address, the resources and strategies that the SCYEC employs, and the short-term results and long-term impacts the SCYEC expects to achieve. Using the logic model categories, the program design is described here and represents the chronological sequence of events.

Youth Needs

Overall, Sonoma County may be considered affluent due to an average income that is higher than the State average, and poverty and unemployment rates that are lower than the State average. However, the experience of youth in Sonoma County is significantly different from that of adults. Youth ages 16-24 typically have higher rates of poverty than adults ages 25 and older. In 2006, the youth poverty rate was 17.0% compared to the adult poverty rate of 8.3%. By 2010, the youth poverty rate had grown to 22.1% while the adult poverty rate had grown to 12.6% (American Community Survey Table B1701, U.S. Census). More striking is the lack of employment opportunities for youth. Through the recent recession, youth unemployment increased dramatically. For Sonoma County youth ages 16-19, unemployment increased from 12.6% in 2006 to 34.2% in 2010. And for Sonoma County young adults ages 20-24, unemployment increased from 7.4% in 2006 to 20.6% in 2010 (American Community Survey Table S2301, U.S. Census). Compare this to the increase for adults ages 25 to 64 years old from 4.6% in 2006 to 10.2% in 2010.

Sonoma County Unemployment by Age

![Unemployment by Age Chart]

2006 2007 2008 2009 2010

12.6% 20.1% 27.4% 34.2%
7.4% 14.7% 17.8% 20.6%
4.6% 5.7% 5.5% 8.1%
3.7% 10.1% 10.2%
Funding
In 2011, six organizations provided $973,595 to support the SCYEC. This is more than the $850,000 investment in 2010 but less than the $1.2 million invested in 2009 with the American Recovery and Reinvestment Act (ARRA) funding. The 2011 funding was as follows:

- $631,652 from the Water Agency to fund youth and fund the evaluation
- $309,623 from the Workforce Investment Act to fund youth
- $15,000 from the Miranda Lux Foundation to fund youth
- $7,320 from the Sonoma County Fish and Wildlife Commission to fund youth
- $5,000 from the Agricultural Preservation and Open Space District to fund youth
- $5,000 from the Kaiser Permanente Foundation for the Kick-Off Event

Select and Train Crew Leaders and Crews
Five non-profit organizations (hereafter called “youth providers”) recruited youth ages 14-24 for the 2011 summer program. They accepted intake forms, screened youth, and made selection decisions. They also recruited and hired older youth and adults to work as crew leaders. Youth providers oriented and trained participating youth and crew leaders for their summer work assignments. This orientation and training commenced at the beginning of the summer and continued through the summer as job-specific training needs arose.

2011 Youth
In 2011, the youth providers hired 25 young adults and adults to work as crew leaders and selected 211 youth to participate in the education and work program. All crew leaders and 192 youth finished the summer. Of these, 171 youth worked on a crew and 21 youth worked in individual placements. Nineteen (19) selected youth did not complete the summer. Their reasons were varied and included obtaining full-time employment (2), starting college (2), being arrested (2), being released for poor performance (3), and a family emergency (1). The reasons for the other nine youth are unknown. This will be tracked more carefully in 2012.
The youth who participated in the 2011 SCYEC were demographically diverse, as illustrated in the graph below. Gender, age, race, job assignment, prior experience with the SCYEC, and special needs were documented to more fully understand youth needs and youth experience with the SCYEC. Each demographic category was correlated to every other demographic category to ensure that there were no unintended disparities in how services were delivered or in how youth experienced the SYCEC.

In 2011, there were no significant differences in gender or age between youth who were selected for the program, youth who completed the summer, and youth who did not complete the summer. This means there does not seem to be any disparity in the selection process or summer completion based on gender or age.

There were two statistically significant relationships between demographic groups related to the selection process. As expected, older youth were significantly more likely to be in their second or third year with the SCYEC. Only 14% of youth ages 14-15 were in their second year of the SCYEC (none were in their third year) compared to 38% of youth ages 16-21 who were in their second or third years. Youth with prior SCYEC experience were likely to be reselected. Of the 104 youth who were not selected, 5% had one or two years previous experience with the SCYEC. Of the 211 youth that were selected, 33% had one or two years previous experience with the SCYEC.

And finally, there was one significant relationship within demographic groups: males were more likely to have special needs (52%) than females (32%).

Youth funded by the Workforce Investment Act, 47% of all 2011 youth participants, must meet eligibility requirements which include being homeless, a runaway, a foster youth, or living in a family with low income. Eligibility also requires the existence of at least one barrier to employment such as poor literacy skills, being a teen parent, substance abuse, or poor school achievement. Youth funded by sources other than WIA do not need to meet these requirements. In 2011, 53% of youth were funded by the Water Agency, the County Fish and Wildlife Commission, the Miranda Lux Foundation, or the Agricultural Preservation and Open Space District. There were significant and expected (due to the WIA requirements) differences in the youth funded by each source as illustrated in the graph on the following page.
Crew Work and Individual Placements

Participating youth were placed in a work assignment by the youth providers. Most youth (171) were assigned to crews that completed outdoor ecology work (described below). A few youth (21) were assigned to individual placements working in a variety of settings. Individual placements included administrative support such as filing, copying, front desk management, inventory, and event management. They also included animal care and delivering summer camp programs for children. Work assignments were based on host site needs and youth needs and preferences.

Kick-Off Event

The summer started with a Kick-Off Event at a County park with all youth providers, participating youth, and crew leaders. The event included motivational speeches by youth from past years, elected officials, and program staff. It also included a meal funded by the Kaiser Permanente Foundation.

Exposure to a Work Environment

The SCYEC exposes youth to work environments and helps them develop the skills defined by Sonoma County employers as necessary to begin work. In 2005, the Youth Council of the Workforce Investment Board, in partnership with the Office of Education, surveyed area employers and used the results to develop Sonoma County’s “Top Ten Skills Plus!” – a list of the skills deemed necessary to enter the workforce. These 15 skills serve as the core of the Office of Education’s Work Ready Certification. During the SCYEC, all youth were coached and mentored on the following 10 of the 15 “Top Ten Skills Plus!” The 11th skill, safety, was added specifically for the SCYEC in recognition of the criticality of safety in an outdoor work environment.
1. Demonstrates willingness to work (works hard and is enthusiastic)
2. Demonstrates integrity (is ethical and maintains confidentiality)
3. Demonstrates promptness (is on time and attends to tasks promptly)
4. Avoids absenteeism (comes to work regularly)
5. Avoids the use of language or comments that stereotype others (talks with others respectfully)
6. Maintains appropriate grooming and hygiene (follows workplace grooming and hygiene standards)
7. Is respectful of the opinions and contributions of others (listens attentively and is open to others’ thoughts)
8. Takes responsibility for completing own work accurately (works carefully and checks work thoroughly)
9. Demonstrates willingness and ability to learn ( Learns new job skills readily)
10. Works well with others as part of a team (helps team achieve goals consistently)
11. Follows procedures established to promote safety on a consistent basis (demonstrates a conscientious safety attitude)

Some youth, especially those in individual placements, were also coached and mentored in an additional five skills:

12. Communicates in spoken and written English (speaks and writes clearly)
13. Reads and understands written information (comprehends written materials easily)
14. Has and applies computer skills (uses a computer and software programs competently)
15. Demonstrates customer service skills (serves customers effectively)
16. Uses and applies basic math (uses math to solve problems accurately)

To track youth progress toward improving these work skills, their crew leader or supervisor rated them up to four times through the summer. The rating levels are described on page 14.

Ecology Work
For eight weeks, youth working in outdoor crews provided environmental crew work at 23 outdoor worksites. Some work assignments lasted a few hours or days and others lasted the full summer. Outdoor crew work included stream restoration such as removing invasive species and planting native shrubs and trees, building trails, and restoring wetlands and open spaces. The 23 work sites in 2011 for crews were as follows:

1. Armstrong Redwoods
2. Badger Park
3. Bouverie
4. Boys & Girls Club of Greater Santa Rosa
5. Burton Avenue Recreation Center
6. Camino Colegio
7. City of Cloverdale Library
8. City of Cloverdale Parks
9. Corona Creek
10. Crane Creek
11. Five Creek
12. Healdsburg City Hall
13. Hinebaugh Creek
14. Keiser Park
15. Kids Street Learning Center
16. Larson Park
17. Petaluma Bounty Farm
18. Prince Memorial Greenway
19. Ranchero Mark West
20. Rooster Run Golf Course
21. Santa Rosa Creek
22. Stewardship Park
23. Willowside Creek

Environmental Education
By immersing youth in classroom education about the environment, assigning them to ecology-related worksites, and focusing daily on environmental stewardship, the SCYEC seeks to develop within youth a love for the environment. The weekly classroom environment educational provided by the Water Agency covered Nature and Environmental Awareness, Cycles of the Ecosystem, Water and the Watersheds, and Plant Maintenance and Resource Conservation.
Worksite learning depended on the worksite and was facilitated by the youth provider, the host site, and the crew leaders.

**Opportunity Fair**
The summer ended with an Opportunity Fair. The purpose of the Opportunity Fair was to disseminate information about local jobs, educational options, and social services. Youth participated in mock job interviews and financial workshops, and browsed booths of 28 local business and service organizations including Macy’s, Amy’s Kitchen, Wal-Mart, Hyatt, Exchange Bank, Armed Services, Sonoma State University, Santa Rosa Junior College, Job Link, and VOICES Foster Youth Resource Center.

**Cross-Sector Collaboration**
The SCYEC brings together a diverse group of public and private organizations who each perform unique roles to ensure the success of the SCYEC.

**Workforce Investment Board**
In 2011, program funding included the Workforce Investment Act through the Workforce Investment Board (WIB) and its Youth Council. Working in collaboration with the WIB and the Water Agency, WIB staff developed and issued a Request for Proposals in 2009 to select and fund youth providers to select and supervise participating youth for three years. Based on this RFP process, the WIB recommended, and the Board of Supervisors approved, contracts with five local service providers to select, train, supervise, and evaluate the SCYEC youth participants.

- Social Advocates for Youth employed 102 youth in Santa Rosa and Sonoma Valley
- Petaluma People Services Center employed 24 youth in South County
- West County Community Services employed 22 youth in West County
- Sonoma County Adult and Youth Development employed 22 youth in Cotati and Rohnert Park
- The Center for Social and Environmental Stewardship employed 21 youth in North County

**Youth Providers**
Youth providers, recommended by the WIB and approved by the Board of Supervisors, fulfilled the following roles:

- Served as the employer of record for the participating youth and crew leaders
- Oriented and trained participating youth and crew leaders
- Provided day-to-day supervision and oversight of each crew
- Identified and coordinated with project hosts to manage each crew’s work and ensure on-the-job safety and educational opportunities
- Transported work crews to and from project sites
- Ensured that crews had necessary safety gear, tools, and materials to complete tasks in a safe and efficient manner
- Supported youth participation in educational components provided by the Water Agency
- Provided case management, counseling, referrals, and educational support to participating youth as needed
- Participated in the evaluation by ensuring that all youth-related data was collected and submitted
Host Sites
Host sites provided meaningful work and learning opportunities at job sites for youth during the summer work experience. Host sites were recruited by the Water Agency, the Human Services Department, and by youth providers. In 2011, the following 26 organizations hosted participating youth.

<table>
<thead>
<tr>
<th>Environmental Groups</th>
<th>Non-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Audubon Canyon Ranch</td>
<td>1. Boys &amp; Girls Club of Marin and Southern Sonoma County</td>
</tr>
<tr>
<td>2. Land Paths</td>
<td>2. Boys &amp; Girls Club of Sonoma Valley</td>
</tr>
<tr>
<td>3. Petaluma Bounty Farm</td>
<td>3. Boys &amp; Girls Club of Greater Santa Rosa</td>
</tr>
<tr>
<td>4. Russian River Keepers</td>
<td>4. Kids Street Learning Center</td>
</tr>
<tr>
<td>5. Stewards of the Coast and Redwoods</td>
<td>5. PEP Housing</td>
</tr>
<tr>
<td>7. Windsor Garden Club</td>
<td>7. Petaluma People Services Center</td>
</tr>
<tr>
<td>Governmental Entities</td>
<td>Governmental Entities</td>
</tr>
<tr>
<td>1. City of Cloverdale</td>
<td>1. City of Cloverdale</td>
</tr>
<tr>
<td>2. City of Healdsburg</td>
<td>2. City of Healdsburg</td>
</tr>
<tr>
<td>4. City of Rohnert Park</td>
<td>4. City of Rohnert Park</td>
</tr>
<tr>
<td>5. Sonoma County Regional Parks</td>
<td>5. Sonoma County Regional Parks</td>
</tr>
<tr>
<td>7. Sonoma County Agriculture and Open Space District</td>
<td>7. Sonoma County Agriculture and Open Space District</td>
</tr>
</tbody>
</table>

These host sites fulfilled the following roles:

- Participated in program planning to determine final projects and crew assignments
- Worked closely with all program partners to ensure valuable experiences for participating youth
- Provided an onsite contact and technical supervision on the worksite that included clear expectations about what needed to be done, and why it was important to the environment and/or community
- Provided a thorough orientation to the jobsite including safety issues and procedures, logistics, and any other necessary information
- Assisted crew supervisors in identifying appropriate and relevant skill development learning objectives, and educational enhancements that could be incorporated on the worksite
- Participated in the evaluation by sharing data about the positive environmental impacts resulting from the SCYEC
- Participated in events such as the Kick-Off Event and the Opportunity Fair, as available

Water Agency
The Water Agency provided 65% of the program funding, recruited host sites, designed and delivered the environmental education, and hosted seven worksites which included materials, supplies, and professional supervision. In 2011, the Water Agency funded New Ways to Work (see page 12) and the program evaluation. Finally, the Water Agency tirelessly seeks grant funding to support the ongoing expansion of the program.

Human Services Department
The Human Services Department identified and allocated all available federal and state funding to support the SCYEC, managed the contracts with the youth providers, recruited host sites, ensured a consistent program design and implementation across sites, ensured compliance with applicable state and federal requirements, and coordinated the Kick-Off Event and the Opportunity Fair. The Human Services Department also conducted the evaluation.
Office of Education
The Office of Education provided materials and staff to support work-readiness assessment and education, including a lifetime subscription to the Küder online career assessment tool for each youth. In addition, they supported the design and delivery of the Opportunity Fair, including delivering the financial workshops and providing the venue.

New Ways to Work
New Ways to Work, a local non-profit organization that seeks to build community connections that prepare youth for success as adults, facilitated the leadership team, assisted in the overall project design, assisted with the evaluation, and helped broker relationships between youth providers and host sites. New Ways works with partners to identify resources for ongoing implementation of the SCYEC.
SHORT-TERM RESULTS for YOUTH

The 2011 SCYEC achieved quantifiable and positive short-term results for youth in the areas of safety, work skills, relationships, income, and planning for the future. Furthermore, youth participants were highly satisfied with their SCYEC experience.

Safety

Safety is an important component of outdoor work. The 2011 SCYEC emphasized safety by formally training youth about tool safety, hazards in the work environment, dehydration, and heat exposure. Each day, crew leaders emphasized safety before starting a new project and through close supervision. When safety issues were identified, crew leaders reported them to their youth provider, who took action to prevent harm from these safety concerns. When appropriate, youth providers shared safety information and strategies to ensure consistent safety practices across all sites. This pervasive focus on safety resulted in a culture of safety in the summer worksites, as illustrated in the following graph.

When asked, 97% of crew members and 84% of youth in individual placements reported that their teammates took safety seriously. And, prior experience seemed to affect expectations for co-workers’ approach to safety. Only 77% of youth in their third year of the SCYEC said that their fellow crew members took safety seriously, compared to 98% of youth in their first or second year of the SCYEC.
Ten percent (10%) of youth reported they had safety concerns during the summer. These concerns included finding syringes, poison oak, steep hills, slippery footing, and proximity to homeless people. Despite these concerns, youth were uniformly impressed with their supervisor’s management of safety. At the end of the summer, 110 youth voluntarily commented on safety management at their worksite – more comments than any other topic. Outdoor crew members were almost twice as likely to comment on this topic as individual placements (60% compared to 33%). Youth who commented on their supervisor’s approach to safety most commonly reported that their supervisor responded to safety concerns “quickly and well,” “efficiently,” “with full responsibility,” and “calmly and with care.” Most of these youth also described their crew leader actively talking about safety hazards and how to avoid them. Many youth reported that their crew leader proactively avoided safety problems by “checking the site before we worked.” A few youth mentioned the availability and use of a first-aid kit on site.

“He took a lot of concern and did everything to make it safe.”

“We went over the hazards of our site every morning before we even approached our site.”

In their comments, 17 youth also discussed how their SCYEC safety training helped prepare them for future work and increased their attractiveness to future employers. These youth recognized the importance of knowing how to use tools safely.

**Improved Work Skills**

A primary objective of the SCYEC is to prepare youth for further employment. And, information collected during the 2011 SCYEC program clearly suggests that youth made significant improvements in their work skills through the summer. Informally, youth received on-the-job training regarding work habits, developed work-readiness skills, and successfully worked with diverse teams of people on meaningful projects. As described on page 9, the SCYEC educated youth about and assessed youth on 11 basic work skills plus five additional work skills. Crew leaders and individual placement supervisors were expected to assess each youth four times during the summer and to use the assessment results to guide their mentoring and coaching with each youth. Virtually all youth (99%) reported that their crew leader or supervisor completed the worksite evaluations. And, virtually all youth working in crews (97%) reported that their supervisor reviewed their evaluations with them. However, only 72% of youth working in an individual placement reported the same. Overall, 94% of youth reported that the worksite evaluations were useful. When crew leaders and supervisors rated youth, they used the following rating scale:

- **0 Not Exposed**: Youth was not provided the opportunity to achieve this objective or demonstrate the skill.
- **1 Training Level**: Preparing to become work-ready, but has difficulty completing tasks without prompting and repeated help. Does not readily request help. Does not attempt task before asking for or receiving assistance.
- **2 Improving Toward Entry Level**: More work ready. Has difficulty completing some tasks. May attempt task before asking for help. Needs prompting or assistance.
- **3 Entry Level**: Meets and demonstrates the skills at a level equal to what is expected of any employee in a similar position. Completes tasks and work projects with and without help. Improves work using team or supervisor feedback. Meets quality standards.
- **4 Exceeds Entry Level**: Demonstrates mastery of skills at a level above what is expected of any employee in a similar position. Uses information generated personally and by others to improve work quality. Identifies problems before they arise and makes adjustments accordingly. Exceeds work expectations for quality and attends to detail in the development of projects and assignments.

During the 2011 SCYEC, participating youth clearly improved their work skills. The graph below illustrates the crew leader and supervisor assessment of youth for all 11 skills at the beginning of the summer and at the end of the summer. On average, 10% of youth met the entry level or exceeded entry level during their first evaluation in June. By
August, at their fourth evaluation, on average 93% met the entry level or exceeded entry level. On average, youth improved two levels. (Assessment of the five additional skills is not reported because many crew leaders or supervisors left it blank. This will be managed differently in 2012.)

### Percent of Youth at Levels 3/4
(Entry Level or Exceeds Entry Level)

<table>
<thead>
<tr>
<th>Skill</th>
<th>June</th>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>Hygiene</td>
<td>9%</td>
<td>14%</td>
</tr>
<tr>
<td>Safety</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Learns</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Integrity</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Teamwork</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Language</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Promptness</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Responsible</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Willing to Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absenteeism</td>
<td></td>
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</tr>
</tbody>
</table>

Although these results are promising, two significant findings suggest that the use of the worksite assessment may be inconsistent and/or that it may not accurately measure work skills. On the other hand, there are also two significant findings which suggest that perhaps the worksite assessment is an accurate reflection of work skills – or they may also confirm that the assessment is difficult for the crew leaders to use.

First, this work skills assessment was designed to be used by employers who have prior experience with employees and who have a common understanding about “entry level.” For the SCYEC, this work skills assessment is used primarily by crew leaders who may have no prior supervisory experience. In fact, the assessments by crew leaders and supervisors in individual placements were statistically different on the June assessment for 10 of the 11 basic work skills (all except willingness to work), as illustrated in the first graph on the next page. In every case, the individual placement supervisor rated the youth higher than did the crew leaders.

Second, in all 11 basic work skills, Latino youth were rated higher by their crew leader (but not their individual placement supervisor) as illustrated in the second graph on the next page. It is possible that the Latino youth in the 2012 SCYEC did have higher work skills at the beginning of the summer. They were not more likely than other youth to have prior SCYEC experience but perhaps they are more likely to have other work experience (which was not measured). Or, there may be something about the role of the crew leader that impacts their initial assessment of youth. The role of the crew leader encompasses both supervising and counseling – potentially a more personal relationship than that of an individual placement supervisor. And, the crew leaders spend all day every day with the youth, while individual placement supervisors do not. This more intense day-to-day interaction may impact the first work skill assessment by crew leaders. At the end of the summer, at the fourth work skills assessment, there was no difference in ratings by race in the crew leader assessments.
Work Skills Assessment by Job Placement
Percent of Youth assessed at Entry/Exceeds in June

- Crew Leader (n=138)
- Individual Placement Supervisor (n=13)

Work Skills Assessment by Race
Percent of Youth assessed at Entry/Exceeds in June by Crew Leader

- White (n=50)
- Latino (n=55)
- Other (n=27)
Third, youth with prior SCYEC experience were less likely to be rated by their crew leader (but not by individual placement supervisors) as “Training Level” (the lowest level) during the first assessment in June for six of the eleven basic work skills. The following graph illustrates this finding. However, at the last assessment in August, there was no difference in crew leader assessment by prior SCYEC experience. This suggests that by the end of the summer, youth in their first summer of SCYEC had caught up to youth with prior SCYEC experience in terms of basic skills. Although it is also possible that crew leaders knew which youth had prior SCYEC experience and therefore did not rate them as “Training Level.” Because the assessment does not include advanced work skills, it is unknown if youth with prior SCYEC experience made gains in other, more advanced skills.

**Work Skills Assessment by Prior SCYEC Experience**
Percent of Youth assessed at Training Level in June by Crew Leader

<table>
<thead>
<tr>
<th>Skill</th>
<th>No Prior SCYEC</th>
<th>Prior SCYEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful</td>
<td>76%</td>
<td>71%</td>
</tr>
<tr>
<td>Hygiene</td>
<td>53%</td>
<td>51%</td>
</tr>
<tr>
<td>Learns</td>
<td>81%</td>
<td>80%</td>
</tr>
<tr>
<td>Language</td>
<td>80%</td>
<td>62%</td>
</tr>
<tr>
<td>Responsible</td>
<td>85%</td>
<td>53%</td>
</tr>
<tr>
<td>Willing to Work</td>
<td>81%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Finally, the average change from first assessment to last assessment was significantly greater for females than for males on nine of the eleven basic skills – as assessed by crew leaders (but not by individual placement supervisors). This means that crew leaders documented greater gains in skills for females than for males. This seems to mirror the experience in schools that, on average, females have higher academic achievement. Or, it may suggest that crew leaders initially underestimated female’s skills.
Average Work Skills Gained by Gender
As Assessed by Crew Leader -- Maximum possible gain is 3 points

<table>
<thead>
<tr>
<th>Skill</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respectful</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Hygiene</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Safety</td>
<td>2.4</td>
<td>2.5</td>
</tr>
<tr>
<td>Learns</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Integrity</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Teamwork</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Promptness</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Responsible</td>
<td>2.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Willing to Work</td>
<td>2.4</td>
<td>1.9</td>
</tr>
</tbody>
</table>

In addition to the work skills assessments conducted four times by the crew leader or supervisor, youth also answered questions about and voluntarily commented on their own skill development. Overall, 93% of youth self-reported that the SCYEC helped build their job skills. However, this was not consistent across races. Seventy-nine percent (79%) of youth with an ethnicity other than White or Latino reported that SCYEC was helpful in building their job skills compared to 97% of White and Latino youth. Youth were asked to select, from a list of eight skills, which they had worked on during the summer. They could select more than one skill. The following graph illustrates the youth answers.

Self-Reported Skill Development
Percent of Youth Answering Yes

Teamwork 77%
Responsibility 69%
Willing to Learn 66%
Being on Time 64%
Communicating Well 64%
Safety 62%
Respectful of Others 56%
Integrity 47%
Hygiene 42%
These answers are mirrored in the voluntary comments made by the youth. Youth commented extensively about the first six of these skills (teamwork through safety on the graph). They commented very little about the last three skills.

By far, the most common benefit of the 2011 SCYEC, submitted in voluntary comments from youth, was simply gaining job experience and improving their resumes. One hundred and nine (109) youth made comments in this area, representing 53% of crew members and 86% of youth in individual placements. These youth felt they were now well prepared for future job interviews. Many commented generally on their skill development and, even if they were interested in different types of jobs for the future, they felt that the skills they gained would be beneficial. These youth also appreciated that they now had a good reference. For many of these youth, this was their first job and they recognized the value of this job in increasing their competitiveness for a future job. Youth also expressed pride in developing specific work skills such as “entering 7,000 names into a database,” “being able to multi-task,” “speaking in front of a group of kids,” and “learning I can be a leader.” Several youth commented that increasing their work skills “teaches me to be more confident.”

“Because it gives me work experience …, I have more confidence towards working.”
“If employers see I have worked before, I might have a higher chance of getting a job.”
“… now I know I’m capable of being hired and doing a good job.”
“I’m sure this kind of work probably looks good on a resume.”
“I am able to say that I’ve done well and maintained a job…”
“I think it’s a good starter job.”
“I think the program helps you get employed because it gives you job experience and field skills.”
“Having work experience really makes a difference.”
“This would look great in a job portfolio…”

In addition to generally discussing the value of gaining work experience, youth also identified three specific job skills that they appreciated: a work ethic, time management, and working with children.

**Work Ethic**
A significant value to the youth from having exposure to a work environment was developing a work ethic. Sixty-one (61) youth mentioned becoming more responsible, learning to work hard, becoming more reliable, and learning initiative. Basically, these youth understood that learning how to work was building character, honesty, integrity, healthy job habits, attitude, and how to “try my best.” Another word these youth used was professionalism. Many youth expressed pride in learning how to “work hard.”

“This is my first real job and it shows me the value of hard work.”
“Work builds character.”
“It teaches you that to get somewhere in life you have to work for it.”
“It’s teaching me how to act during work and how to keep a job.”
“It gives a feel of the concept of working.”

**Time Management**
Twenty-one (21) youth commented specifically that the SCYEC helped with their time management; to be on time for a job, to set a schedule, to be punctual, and to get up earlier.

“It helps by me needing to have a schedule and be on time.”
“It’s teaching me to be on time.”
“I’m proud of being on time everyday.”
Working with Children
Many youth had individual placements working with children. And, 17 youth seemed to enjoy and be proud of this experience, which was reflected in their comments, representing 52% of youth in individual placements and 4% of crew members.

“It changed my goals because of the impact it made to me in working with kids.”
“I learned how to work with kids and the job opportunities.”
“I really enjoyed getting to know and play with some of the kids.”
“I helped kids solve their conflicts with other kids.”
“I’m proud of working with kids and becoming a good role model.”

Relationship Building
An important component of long-term achievement and successful independent living is the ability to develop and maintain relationships. The literature review identifies a variety of short-term results and long-term impacts for which positive relationships are critical: academic achievement, leadership development, employment, successful independent living, and family stability.

Teamwork
An important strategy of the SCYEC is providing opportunities for youth to work in, and be successful in, teams. At the end of the summer, 71 youth voluntarily commented on the value of working in a team. They reported improving their teamwork skills and learning to work with people they don’t know. These youth believed that these teamwork skills will benefit their future job searches because future employers “will know I have experience working with others.” These youth also noted that working in a team is more fun, promotes problem solving, and makes the job easier. And, youth were proud of “helping my other coworkers if they needed help.” As a subset of teamwork, 14 youth specifically noted that by working in a team setting they improved their communication skills.

“I know in the future I can get along with people.”
“I was successful at working with a team.”
“In almost every job teamwork is most important. That is what this job teaches.”
“I put aside my differences that I had with many of the other youth, and just learned to accept.”
“It helps with communication skills.”

Relationships
An important result of the SCYEC for youth is “making friends,” “meeting new people,” and “building relationships.” Fifty-five (55) youth voluntarily discussed how much they enjoyed meeting and working with new people, “all different types of people.” Youth commented that the “people I work with are great” and “that we all get along well, kind of like a little family.” One youth described why these relationships are important, “I just like the people in here because they respect you well and understand what our living situations are. This job gives us a chance.”

Youth Income
Providing youth with income is an important goal of the SCYEC and most of the program funding was used to pay for youth wages. During the Opportunity Fair, youth received financial education which emphasized saving money, managing money, and using credit wisely. Over the summer, participating youth each earned more than $1,200. More than half (53%) saved some or all of their income. One-third (37%) used their income for household expenses which included food, bills, family members’ needs, necessities, rent, and phone. A third also reported spending their income on clothes. Other expenses included school (25%), entertainment (22%), and their car (14%) which included car payments, gas, license, driver’s education, and repairs. The following graph illustrates the youth’s use of their income over the summer.
Youth Spending

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Savings</td>
<td>53%</td>
</tr>
<tr>
<td>Household Expenses</td>
<td>37%</td>
</tr>
<tr>
<td>Clothes</td>
<td>34%</td>
</tr>
<tr>
<td>School</td>
<td>25%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>22%</td>
</tr>
<tr>
<td>Car</td>
<td>14%</td>
</tr>
<tr>
<td>Court-Ordered</td>
<td>4%</td>
</tr>
</tbody>
</table>

Sum of percents does not equal 100% because youth were invited to select all that apply.

However, not all youth spent their income in similar ways. Ethnicity impacted spending patterns more than any other demographic. More Latino youth spent their income on school (60%) than White youth (26%) or youth of other ethnicities (14%). More Latino youth (36%) and youth with other ethnicities (35%) spent their income on household expenses than did White youth (29%). And, more White youth (27%) spent their income on their car compared to Latino youth (11%) or youth with other ethnicities (3%). Age also impacted spending. More youth ages 16-17 reported spending their income on their car (20%) compared to younger (8%) and older (5%) youth. Youth ages 16-17 were more likely to spend their income on entertainment (30%) than younger (17%) or older (12%) youth. Youth with special needs were less likely to spend their income on entertainment (15%) than other youth (32%). Finally, youth with prior SCYEC experience were more likely to enjoy entertainment with their income (44%) than youth in their first or second years (20%).

Youth clearly appreciated the opportunity to earn income, with the strongest appreciation expressed by youth ages 14-15 (39%), followed by youth ages 16-17 (21%) and youth ages 18 and older (16%). In their comments, 44 youth discussed their income. They noted that the SCYEC was valuable to them because of the pay and that they needed the money. Some thought it was a fun way to earn money. Finding work for youth under 18 is challenging so the opportunity to earn an income was appreciated. Some noted that the pay confirmed for them that they worked hard and that work pays!

“*This type of work teaches the worker the true value of the dollar.*”

“I *think it’s helpful because it shows young people what it’s like to make their own money.*”

“It’s difficult to find a job when you’re under 18.”

“I *love having paychecks because it shows me that hard work pays off.*”

“I *earned my own money to support my child.*”
Planning for the Future

During the summer, the SCYEC included formal and informal vocational exploration and career planning. A focus of the Opportunities Fair was the chance to network with many employers, practice a job interview, and explore local jobs and post-secondary education options.

When asked about their immediate future, 148 youth (77%) reported that they did have plans for immediately following the 2011 SCYEC. More than half (57%) reported they would be going to school – primarily high school or Santa Rosa Junior College (67% of females and 49% of males). Forty percent reported they would be looking for work, representing 51% of youth ages 18 and older, 41% of youth ages 16-17 and 39% of youth ages 14-15. Youth with special needs were more likely to report they would be looking for work (58%) than youth without special needs (39%). Of the 148 youth who reported plans to go to school or work, 38 (20%) reported they would be attending school and looking for work.

When asked about their long-term plans, 82% of youth reported that the SCYEC had helped them to think about what they will do in their future career, which included 15% of crew members and 48% of youth in individual placements. In their voluntary comments, 37 youth reported that because of their experience with the SCYEC, they have “set goals” and are more “motivated” about their future career. These comments suggest an increased hope about their own futures and job options. And, many specifically commented that the SCYEC “taught me that I should go back to school.”

“I see myself in the future in a different way.”
“It made me see that there’s a lot of opportunities out there. I should take advantage of them.”
“It gave me ideas about what’s out there -- career direction information.”
“It encouraged me to look at all options.”
“I was laid back about getting a job before and now I want to go out and try to find one.”
“It makes me want to get another job and be successful with my life.”
“You start building a structure of different material for the future.”

When thinking about their long-term career goals, 17 youth reported they “want a green job – to make a difference.” Most of these youth want to “get a job at the Water Agency.” Others discussed landscaping or being an energy auditor. These plans to work in ecology jobs clearly came from the SCYEC. “It changed my future in work and education to help the environment” and “because of my education on the environment and my growth in interest in outdoors I wish to further my knowledge and do more to help.”

An equal number of youth (16) reported that their summer experience taught them that they “don’t want to work in this field for my career” or “I know this isn’t what I want to do when I’m older.” For these youth, this realization was useful because “I know now some things I don’t want to do.”

“Doing manual labor is not my cup of tea.”
“I’m going to work in something different when I get older.”
“I don’t like doing this kind of work so I want an education.”

These youth were divided on whether or not the experience they gained with the SCYEC would be transferrable to other fields. About half noted that “it is definitely not my dream job but it is a good experience” while the other half thought “it does not have any skills of what I need for my career” or “it’s only helpful for outside jobs.”

Finally, although 82% of youth reported that the SCYEC helped them think about their future plans, only 31% reported that SCYEC changed their goals. In their comments, 19 of these youth reported that they knew before the summer that their long-term goals are in a different field and that the SCYEC had not changed their plans.
Youth Satisfaction

In the year-end survey, youth were asked six questions about their satisfaction. Satisfaction alone is not sufficient to understand results and impacts of the SCYEC. However, it is important that youth are satisfied and that their suggestions for improvements are considered. The following graph illustrates youth answers to the satisfaction questions.

Youth Satisfaction -- Percent Answering Yes

<table>
<thead>
<tr>
<th>Question</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you have enough work to do?</td>
<td>98%</td>
</tr>
<tr>
<td>Was the education valuable?</td>
<td>97%</td>
</tr>
<tr>
<td>Would you return to SCYEC?</td>
<td>96%</td>
</tr>
<tr>
<td>Was SCYEC a valuable experience?</td>
<td>94%</td>
</tr>
<tr>
<td>Overall, were you satisfied?</td>
<td>89%</td>
</tr>
<tr>
<td>Was the four hour workday long enough?</td>
<td>64%</td>
</tr>
</tbody>
</table>

To underscore their satisfaction, 88 youth commented, in general, that they “loved it,” “it was fun,” or “it was a wonderful opportunity.”

“It’s life changing!”

“I think this was a really great program and I’m very grateful to have been part of it.”

“This program is great and I’d love to see it continue for many years to come.”

“There is not one thing I don’t like about this program!”

When asked for ideas about how to improve the SCYEC, 72 youth (38%) reported they had “none whatsoever – everything is awesome!” Sixty-two (62) youth did provide suggestions for improvements. The most common suggestion was to increase the hours each day (50 youth), followed by increase the pay rate (21 youth). The request for higher pay seemed to reflect a real need for more income (“we need a little better pay” and “it’s very little pay when taxes get cut out”) and a sense that the pay is not equitable for the work performed (“it’s not much for the kind of work we do” and “people with the water agency get over $10 an hour”). Youth with prior SCYEC experience, who had worked more hours in past summer, were more likely to request more hours (39%) than youth in their first year of SCYEC (20%). Similarly, Latino youth were more likely to request more hours (41%) compared to White youth (17%) or youth with another ethnicity (24%).

“An increase in hours means an increased paycheck, which makes the overall effort more worthwhile.”

“I hope further budgets will allow longer hours.”

“I really like the program but I want to work more.”

A few youth (9), mostly ages 14-15, requested more tools, more tool maintenance, better quality tools, and power tools. A few other youth (8) requested more diversity in work sites, more options for where to work, and to do something different each day. And finally, small groups of youth (less than 5 youth each) made a variety of other suggestions: extend the program beyond the summer, improve organization, start earlier or start later, provide cold water, lengthen training or shorten orientation, provide longer breaks, and provide better shirts for “them hot days.”
SHORT-TERM RESULTS for the ENVIRONMENT

Related to the environment, the SCYEC seeks two short-term results: increased environmental knowledge for participating youth and completed ecology projects.

Increased Environmental Knowledge

Youth clearly believe that they increased their knowledge about the environment over the summer. Across all demographic groups, youth highly appreciated the opportunity to learn in a work environment. Thirty-seven (37) youth commented in general about being able to “work and learn.” Youth reported that they “learned new stuff that I never knew before” and that they “learned new things every day.” Even youth with prior experience with the SCYEC reported that they “learned a lot every single year.”

At the end of the summer, when asked to comment specifically about what they learned about the environment, 91 youth (all of them crew members) discussed their learning about “wildlife and nature” and “the environment.” Specifically, youth commented on their learning related to plants, water, the impact of garbage on the environment, fish and fish habitat, and the relationship between the environment and human nutrition.

Thirty-five (35) youth volunteered their learning about **plants**, including:

- “I have learned that blackberries are non-native plants.”
- “I’ve learned that coast live oaks can have sudden deaths.”
- “I learned what poison oak looks like.”
- “I have learned how to identify different kinds of plants.”
- “I learned how non-native plants take water from native plants.”

Youth who were in their second and third years of the SCYEC were less likely to report that they learned new information about plants in 2011. Only six percent (6%) of youth in their second and third years of the SCYEC reported that they still learned new information about plants, compared to 24% of youth in their first year. Similarly, as would be expected, no youth in individual placements voluntarily reported learning about plants compared to 21% of youth who worked on a crew.

Twenty-seven (27) youth discussed their learning related to **water**, including:

- “Water is important and we need to take care of it because there isn’t a lot of water.”
- “I learned how we get our water and how the Water Agency cleans it.”
- “I learned how water is carried through the city and how they make sure it’s safe to drink.”
- “I learned about water stations and wells and water filtration.”
- “Watersheds are run off that lead to lakes, rivers, and the ocean.”
- “There are many different ways to save our water.”
Fourteen (14) youth reported what they learned about garbage and decomposition, including:

- “Trash should be picked up because it takes a long time to decompose.”
- “I learned that Styrofoam cups never decompose.”
- “I learned about the rates of decomposition of common litter items.”

Young youth were the most likely to report that they learned about garbage and decomposition. Nineteen percent (19%) of youth ages 14-15 volunteered information they learned about decomposition compared to 5% of older youth.

Twelve (12) youth discussed what they learned about fish and fish habitat, such as:

- “I’ve learned a lot about the fish cycle.”
- “Salmon – I learned how they grow, how they live life in salt water and fresh water.”

Latino youth were more likely than youth of other ethnicities to discuss their learning about fish and fish habitat (14%) compared to 3% of youth who are not Latino.

Finally, eight (8) youth commented that they learned about the relationship between the environment and nutrition for humans.

- “It takes a lot of water to make a one pound burger!”
- “I learned how many gallons of water a person uses per minute.”
- “I’ve learned about where all our food comes from and how much water we use in our daily lives.”

**Completed Ecology Work**

In 2011, youth participated in outdoor work crews collectively accomplished the following work for their communities:

- Planted 7,402 plants
- Harvested 800 crops
- Removed 13,300 pounds and 1,598 cubic yards of debris
- Maintained 13.3 miles of waterway
- Shredded 628 cubic yards of biomass
- Maintained 13.5 miles of land trail

The opportunity to participate in ecology work was noted and appreciated by youth. At the end of the summer, 57 youth commented how much they appreciated the opportunity to work outside with nature and fresh air. Some youth noted specific outdoor duties they enjoyed such as cutting and pulling trees out, working in the creeks, planting, harvesting organic foods and knowing the wildlife. In general, these youth “enjoyed the type of work” and felt that the outdoors work prepared them well for other outdoor jobs. As expected, crew members were most likely to appreciate outdoor work (32%) compared to youth in individual placements (10%). Youth with special needs (42%) were also more likely to appreciate the outdoor work than youth without special needs (26%).

Host site staff noted that participation in the program allowed them to complete additional ecology work or that program participation made ongoing ecology projects more effective. They said that they “wouldn’t have been able to get where we were without the hard work of the program participants,” or projects “would not have been completed without the SCEYC crew.” One host staff person stated, “Removing the non-native vegetation from the native grass
plants was a huge accomplishment that we could not have done alone. The work of the SCYEC crew ensures that the efforts of our volunteers who planted the native grass plants will endure.”

Not only do youth need to work, but youth work is also extremely valuable to the community. Several host site staff members said that their agencies were able to provide additional or better services than would otherwise have been possible. One host staff noted, “We are able to provide better programming for our members by having more staff.” Another stated, “We saved over $1,000 in staffing costs. This money is put directly back into programming for our students.” By participating in this program, SCYEC host sites were able to provide more services to the community with fewer resources.

Finally host site staff cited the rewarding nature of working with the youth. In the words of one host site staff person, “It was very rewarding to put time into training the youth and watch them develop into leaders at the farm. They took their work seriously and had great work ethic.” Another said, “The SCYEC crew members complete work we otherwise would not be able to get done. They are a very mature, confident, responsible group of youth. It is a joy working with them every summer.”
SHORT-TERM RESULTS for the COMMUNITY

One important result of the SCYEC is exposing youth to the value and joy of community service.

Exposure to Community Service

The value of community service was voluntarily mentioned by 76 youth (40%) at the end of the summer. One youth called this “pride work.” Many of these youth were proud of “helping our community” by cleaning the environment, making parks safe, helping people who need help, and making a positive influence in kids’ lives. Youth talked about “my town” and “the place I value” and “giving back to my community.” One youth noted that “I learned that regardless of how little you have you can always give more.”

For these youth, community service and environmental stewardship were clearly linked. They expressed a great deal of pride about helping the environment. They were “satisfied when the area was clean.” They felt proud of “helping the environment” and “keeping the parks looking good.” They also “liked it when people passed by and appreciated our work.”

“I’m most proud of the trees we planted.”
“… helping the community garden and making it look nicer and more appealing.”
“We cleaned up the creek to make it a sufficient habitat for animals, and not flood the school.”
“We spread new mulch down the city block... all the neighbors were very thankful for our work.”
DISCUSSION

The SCYEC Leadership Team (listed on the cover) concludes that the SCYEC is needed, successful, and sustainable.

Needed

In Sonoma County there is a significant need for youth work opportunities. Intake was closed when the number of intake forms submitted clearly exceeded capacity in an effort to reduce the screening workload and to prevent disappointment by youth not selected. Providing interesting and paid work attracted a wide variety of youth representing different ages, races, genders, special needs, and previous SCYEC experience.

Youth clearly valued the income they earned. Youth demonstrate responsible, generous, and serious financial management skills. More than half saved money (perhaps better than many adults!). The next three largest spending categories were household expenses for themselves and their families, clothes, and school – all spending that reflects the impact of the recession on families and the need for these youth to support their own basic needs. Only one-fifth of the youth reported spending their income on entertainment. Overall, the youth spending choices reflect a selfless approach to their money and a desire to be responsible members of their families. These spending habits counter the stereotype that youth do not care about their families.

Successful

The SCYEC successfully achieves the desired short-term results of safety, improved youth work skills, relationship building, income for youth, planning for the future, youth satisfaction, increased environmental knowledge, and exposure to community service. Youth consistently agreed on only two primary suggestions for improvements: increased hours and pay.

In the SCYEC, safe work environments are intentionally created. Youth providers, host sites, and crew leaders are all expected to monitor safety -- and in fact they do successfully ensure safety. The youth reaction to the culture of safety was unexpected. Youth overwhelmingly commented on the concern shown for their safety. The experience of being part of a caring community outside their own family was noticed and appreciated. The conscientious approach to safety that is modeled, and that they developed over the summer, is highly valued by employers.

The SCYEC gives youth a chance – and youth seized the chance for success. Regardless of their beginning skills and experience, they worked together, learned together, and succeeded together, collectively ending the summer with high
skill levels and pride in their team accomplishments. Again, the SCYEC busts the misconception that youth today “can’t and don’t do anything.”

Not only do youth need to work, but youth work is also extremely valuable to the community both in beautifying public spaces and helping non-profit service organizations to provide more services.

**Sustainable**

Cross-section collaboration throughout the community has successfully led to three productive summers. Although the funding sources and amounts have varied, and the youth providers and host sites have differed, the collective commitment to supporting youth development remains. In fact, following the 2011 summer SCYEC program, enough funding and host sites were identified to expand into a year-round program. Of the 192 youth who completed the 2011 summer program, 20 continued working into fall as the first participants of a year-round program.
RECOMMENDATIONS

Based on this evaluation, and with a desire to continually improve the SCYEC, the Leadership Team makes the following 12 recommendations related to program design and the evaluation.

Program Design

1. **Hours**

   **Evaluation Finding**
   In 2011, youth worked four hours each day. The most common suggestion from the youth about how to improve the SCYEC was to work more hours each day. Their reasons included to increase their income, to provide more time to complete the work, and to provide more help to the environment. Youth providers and host sites also felt that the four-hour workday in 2011 was too short.

   **Recommendation**
   Increase the hours per day.

2. **Financial Literacy Education**

   **Evaluation Finding**
   Youth spend their SCYEC income on real and serious needs. In 2011, financial literacy education was provided towards the end of the summer.

   **Recommendation**
   Consider providing youth participants with financial literacy education early in the summer to enhance their skills for managing their SCYEC income.

3. **Disparity by Gender**

   **Evaluation Finding**
   The evaluation results suggest that female youth participants made greater improvements in their work skills. This mirrors the experience of public education where male students seem to have lower achievement and greater behavioral challenges than female students.

   **Recommendation**
   Although this finding is only suggestive, it is worth attention. Identify and consider opportunities to ensure that males can achieve the same level of work skill development as females.
4. **Disparity by Job Assignment**

**Evaluation Finding**
Youth who work in outdoor crews seem to have a better experience than youth in individual placements. Youth in work crews were more likely to report that their crew leader reviewed the skills assessment with them, were more likely to have environmental education and work opportunities, and more likely to have the opportunity to develop their teamwork skills.

**Recommendation**
The SCYEC intentionally prioritizes crew work because it is a more effective strategy to promote environmental knowledge, opportunities for ecology work, and practice in teamwork. Continually assess the value of each individual placement related to the SCYEC goals and related to the needs of each youth.

5. **Fidelity to the Model**

**Evaluation Finding**
It is the intent of the SCYEC to meet the criteria for the Portfolio of Model Upstream Programs either as a promising practice or an evidence-based practice. To do so requires standardization across all sites and monitoring of fidelity to the program design. Ensuring that the program is administered essentially the same across youth providers and work sites will increase the likelihood of consistent and positive outcomes for youth, the environment, and the community.

**Recommendation**
Develop policies and procedures and/or a manual to articulate the expected program activities. Monitor youth provider fidelity to the model during regular contract monitoring activities.

**Evaluation**

1. **Work Skills Assessments**

**Evaluation Finding**
Sonoma County is fortunate to have a previously developed and useful list of work skills desired by local employers. However, it is not clear that these skills are adequately understood or consistently used by crew leaders and individual placement supervisors when they are assessing youth. Moreover, the identified skills reflect entry level competence and do not accurately capture the skill development of youth with prior work experience.

**Recommendation**
Continue to refine the training for and use of the worksite skills assessment. Consider investing in psychometric testing (perhaps with the assistance of a local university) to ensure that conclusions about youth skill development are accurate. Additionally, develop a mechanism to accurately assess the skill development of youth entering the SCYEC with more advanced skill sets.

2. **At-Risk Status**

**Evaluation Finding**
The SCYEC evaluation only collected “at-risk” information for youth who had already been determined to qualify for WIA. Because the number of WIA-funded slots was limited, it is highly probable that at least some youth funded by the Water Agency and other funders also have “at-risk” characteristics.
Recommendation
To understand whether the SCYEC is equally effective for at-risk youth and youth with no risk factors, collect the risk information for all youth.

3. Environmental and Community Results

Evaluation Finding
This first SCYEC evaluation made significant progress in measuring the SCYEC results for youth. However, the evaluation does not yet adequately measure the short-term results and long-term impacts on the environment and the community.

Recommendation
Identify ways to thoroughly and accurately measure and present information about the results and impacts for the environment and the community.

4. Youth Future Plans

Evaluation Finding
Information about youth plans immediately following the SCYEC and for the future is important to understanding the long-term impacts of the SCYEC. This information was not adequately collected in 2011.

Recommendation
Develop a reliable method to understand youth’s future plans. Develop methods to track youth for three to five years after their SCYEC experience.

5. Drop-Out Rates

Evaluation Finding
The 2011 SCYEC youth drop-out rate was 9%. Nineteen (19) of the 211 selected youth did not complete the summer. The SCYEC Leadership Team assumes this is a low drop-out rate for youth employment programs.

Recommendation
Collect more information from youth who dropout to better understand their needs. Research dropout rates for similar youth employment programs to understand if the SCYEC rate is excellent, acceptable, or needs improvement. During this research, also identify other ways in which the SCYEC compares to similar youth employment programs as a way to identify opportunities for improvement.

6. Evaluation Data Quantity and Quality

Evaluation Finding
The 2011 SCYEC evaluation solicited the same information more than once and generally produced too much data, often with low response rates. Only 49% of youth provided all the information and opinions requested. Because the youth surveys were frequent and long, youth tended to skip questions and youth providers had difficulty keeping track of the expectations.

Recommendation
Streamline the evaluation data collection to capture information once and collect only information that directly illustrates the logic model. Add the following:
• Use more closed-ended (quantitative) questions and fewer open-ended (qualitative) questions. While quantitative information provides rich details, the extent to which youth comments reflect all youth is unknown. Vital information should be collected quantitatively and open-ended questions should be used to understand the full meaning of the quantitative information.

• Train youth providers and youth about the evaluation data collection tools to improve the overall response rate and accuracy of the information.

• Record youth learning goals and skills development goals at the beginning of the program and then measure success of the youth in reaching these goals during the summer.

• Add quantitative assessments of youth knowledge, attitudes, and/or behaviors related to community service, and environmental knowledge.

• Effectively measure change in opinions, attitudes, and knowledge by measuring each at the beginning of the summer and again at the end of the summer.

• Develop methods to evaluate youth in the new year-round program and to track youth three to five years after their completion to understand long-term impacts.
### Youth Accomplishments

In the report, the youth accomplishments are summarized. Here, all accomplishments reported by host sites are listed.

<table>
<thead>
<tr>
<th>Host Site</th>
<th>Work Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audubon Canyon Ranch</td>
<td>• 6,000 plants planted&lt;br&gt;• 400 feet of vegetation removed&lt;br&gt;• .5 mile irrigation line cleared&lt;br&gt;• Removed and stacked wood&lt;br&gt;• 10 miles of trails cleared</td>
</tr>
<tr>
<td>Boys &amp; Girls Club</td>
<td>• Cleaning and maintenance of clubhouse&lt;br&gt;• Serving lunch to 140 youth each day</td>
</tr>
<tr>
<td>Boys &amp; Girls Club Sonoma Valley</td>
<td>• Assisted with summer camp programs for 1st-3rd graders</td>
</tr>
<tr>
<td>Boys &amp; Girls Club of Greater Santa Rosa</td>
<td>• Plan and implement activities and games with children</td>
</tr>
<tr>
<td>City of Cloverdale</td>
<td>• 3 miles of landscape maintained&lt;br&gt;• 12,800 pounds of weeds removed&lt;br&gt;• 6 birdhouses built and installed</td>
</tr>
<tr>
<td>City of Healdsburg</td>
<td>• 100 agreements scanned&lt;br&gt;• 6 years of resolutions indexed&lt;br&gt;• Mailed and filed business licenses</td>
</tr>
<tr>
<td>City of Rohnert Park</td>
<td>• 105 cubic yards of green waste removed</td>
</tr>
<tr>
<td>Kids Street Learning Center</td>
<td>• 400+ plants planted&lt;br&gt;• 500+ pounds of garbage removed&lt;br&gt;• Removal of weed systems and old ground cover&lt;br&gt;• Installation of planter boxes&lt;br&gt;• Dirt relocation</td>
</tr>
<tr>
<td>Land Paths</td>
<td>• Supervised 25 campers at environmental camp</td>
</tr>
<tr>
<td>PEP Housing</td>
<td>• Front desk tasks</td>
</tr>
<tr>
<td>Petaluma Animal Shelter</td>
<td>• Cleaned and cared for cats</td>
</tr>
<tr>
<td>Host Site</td>
<td>Work Completed</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Petaluma Bounty Farm                                    | • 1,000 plants planted  
• 800 pounds of crops harvested                                                                                |
| Petaluma Museum                                         | • Preparation of museum historic exhibit                                                                                                   |
| Petaluma People Services Center                         | • Filing  
• Organized books  
• Front Desk                                                                                                                   |
| Pets Lifeline                                          | • Daily shelter maintenance                                                                                                               |
| River to Coast Children’s Services                     | • Filing  
• Transfer of fiscal year documents                                                                                              |
| Petaluma People Services Center                         | • Filing  
• Organized books  
• Front Desk                                                                                                                   |
| Russian River Keepers                                   | • 3,000 square feet of weed suppression                                                                                                 |
| Sonoma County Agricultural Preservation and Open Space District | • Perform invasive species removal  
• Dug post holes in preparation for signs to be installed                                                                             |
| Sonoma County Regional Parks                            | • Removed invasive species  
• Trail maintenance  
• Cleaned creek frontage  
• Graffiti removal  
• Trail maintenance for hiking, biking, running, equestrian use                                                                          |
| Sonoma County Water Agency                              | • 1,493 cubic yards of biomass removed  
• Minor upper bank pruning  
• Blackberry and exotic species removal  
• Enhanced habitat for special-status fish and wildlife  
• Provided flood protection  
• 528 cubic yards shredded  
• 13.3 miles waterway maintained                                                                            |
| Stewards of the Coast and Redwoods                     | • Inventory  
• Special event preparation  
• Filing  
• Organizing                                                                                                                   |
| VOICES/On The Move                                     | • Outreach  
• Reception  
• Maintenance                                                                                                                  |
| West County Community Services                          | • Records retention project                                                                                                               |
| Wild Rose                                               | • Event management                                                                                                                         |
| Windsor Garden Club                                     | • 2 plants planted  
• Work on garden pathways  
• Weed removal  
• Garden plot construction activities                                                                       |
Literature Review
Authored by Casey J. Morrigan

Purpose of Review
The purpose of this literature review is to explore the evidence for effective youth employment services to guide the evaluation for the Sonoma County Youth Ecology Corps (SCYEC), and to support the Sonoma County Workforce Investment Board’s Youth Council in its focus on outcomes-based practice.

Background
The Workforce Investment Act (WIA), passed in 1998, is the most recent federal legislation supporting employment and training in the United States. In contrast to previous legislation, WIA created a framework for service delivery that devolved some discretion for service delivery to states and localities, while requiring that universal access to employment services be offered through “one-stop” centers that consolidated user services initiated under multiple Federal funding streams. WIA also provided for a tiered and sequential approach to adult employment services, and required a set of service elements. Under WIA, local boards are the governing mechanism for workforce investment, and a Youth Council must be established as an adjunct to local boards. Performance measures were a part of the original legislation, and were updated in 2003 by the establishment of “common measures” for both adults and youth. Collection of information on the youth common measures took effect in program year 2006 (Dunham, 2006; Brown, 2006). In Sonoma County, the Human Services Department’s Employment and Training Division is the administrative entity for the Local Workforce Area as defined in WIA.

In 2009, Sonoma County initiated the Sonoma County Youth Ecology Corps (SCYEC), a cross-sector collaboration. In 2011, its third year, the SCYEC began an evaluation. Planning for evaluation included the creation of this literature review to provide a backdrop for the design of the evaluation and additionally to support outcomes-based planning and practice by the Youth Council of the Workforce Investment Board.

Introduction
To create this literature review, academic periodicals and gray literature\(^1\) were searched using search terms related to youth and employment. Searches on obesity prevention and environmental education were also conducted, as these elements are part of the logic model for the SCYEC. The review was conducted to determine effective or promising practice in youth employment and evaluation approaches were also examined in the research identified for the review.

Many intervention models for youth employment, particularly for disadvantaged youth, have been implemented and evaluated in the decades of federal investment in job training and workforce development. Program delivery has included residential and non-residential models; intensive and non-intensive case management; community service (usually unpaid or stipended); supports such as transportation and child care; job search and referral support; and training and education components alone and in combination. Some elements of these seem to have impacts, as described below, and some models have initially shown promise that faded when replication did not provide the same results (D’Amico, 2006).

A central finding that emerges from the literature is that rigorous evaluations of youth employment programs conducted mainly in the 1990s have demonstrated that, for the most part, there has been little impact on earnings for youth over the long term for most youth employment programs, regardless of the type of intervention (D’Amico, 2006).

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\(^1\) The academic literature refers to research articles published in peer-reviewed journals; “gray” literature is the body of research publications that are published by reputable research firms; federal, state, or local governments; foundations; professional associations; or other entities but not published in peer-reviewed journals.
However, these conclusions, though reached by way of studies with very strong methodological rigor, have not stood without challenge. Some researchers have reanalyzed or reinterpreted the findings with differing results, introducing uncertainty into the original conclusions (D’Amico, 2006). D’Amico’s review (2006) and other effective practice research (NYEC’s Promising Practices Network, PEPNet; Clymer 2002) suggest that as programs continue to be implemented, investments in evaluation have continued as well. The research in its continuing evolution points to some themes in effective or promising practice in youth employment services in spite of the seemingly definitive findings of “no impact” of the 1990s.

Impacts of youth employment programs have primarily been measured by increases in earnings, both short and long term. Since earnings are affected by high school credential and post-secondary attainment, with an earnings impact of about 8-10% for each year of post-secondary training (LaLonde, 1995, in D’Amico, 2006), programs that positively affect educational attainment can be presumed to affect earnings in turn, though this is not always borne out in impact assessments (D’Amico, 2006). Valentine (2009) confirmed the positive effect of postsecondary education, noting that “returns to baccalaureate degrees surpass returns to associate degrees, and those with an occupational certificate (equivalent to two semesters of full-time study) have higher earnings than those with just some college but no degree” (Valentine, 2009). Earnings for high school students who are enrolled in career technical education are higher than those in academic coursework (Valentine, 2009). Sum (2009) created a cost model demonstrating that high school dropouts, on average, create a negative net fiscal impact on society.

Promising Models
Since the large-scale evaluations of the 1990s, evaluations of various program models have continued. One key evaluation, a large, multisite, randomized controlled trial of summer youth employment initiated under ARRA in 2009, has begun, with interim qualitative and process findings available (though not outcome data). An important interim finding in this study is that most (75%) of the 2009 summer programs had a positive impact on participant work readiness, though readiness was measured in various ways across the sites studied (Belotti, 2010).

CET/JOBSTART
The San Jose Center for Employment and Training (CET) (one of the original JOBSTART sites, a non-residential intensive service program) showed significant earnings gains according to D’Amico (2006). In the subsequent demonstration and replication of CET’s model, only older youth (ages 20-24 at program entry) experienced earnings gains. For these young people, positive earnings effects stayed high through the nine years of follow up so far conducted. For other ages, JOBSTART impact on earnings was “near zero” at the fifth year after intervention (Miller, 2005; D’Amico, 2006).

Service Corps
Jastrzab (1996) reviewed national service corps models for impacts, and found that this program approach was associated with lower arrest rates overall for participants, and some subgroup effects as well: lower pregnancy rates for African American women, and less alcohol consumption for white women. MDRC noted in a briefing monograph (2009) that conservation and service corps models positively affect education and earnings for African American males, but do not show effects in those domains for other participants. In a large evaluation of Job Corps, a residential model offering a stipend to youth, Schochet (2009) found (at 4 years after program entry) negative or no impacts on annual earnings except for older youth (age 20 to 24 at the time of entry into the program), though it had positive impacts on education and training participation rates, including large effects on GED and vocational certificate receipt. Crime (arrest and conviction rates) was also significantly lower for participants.
**QOP**

Quantum Opportunity Program (QOP), an intensive, non-residential case management/out-of-school time model showed strong and positive effects on high school graduation and post-secondary enrollment (Schirm, 2003).

Challenges included retaining youth over time, thus affecting duration and intensity of service provision, even though QOP was operated with a “no exit” policy of long-term follow-up. QOP did not lower risky behaviors for youth (including arrests, convictions, sexual activity, and substance use).

**YouthBuild**

YouthBuild, a stipended construction-oriented program focused on community improvement projects (usually housing construction or rehabilitation), with a youth leadership development and educational components, has shown positive impacts on postsecondary education, job attainment, and wage levels (Partee, 2003). Some YouthBuild programming, targeted at youth offenders specifically, had an impact on earnings, attributed to its case management as well as to participant readiness to change. The YouthBuild model for offenders included education activities and employment, service, vocational training, and supportive services. Retention in the program was affected by stability of program staff, and stipend or bonus incentives to youth for attendance or other positive behaviors (Abrazaldo, 2009).

**Youth with Disabilities**

The literature suggests that effective practice for youth with disabilities or those with mental health disorders includes individualized planning, and employer and community liaison work as part of the supports provided to youth (Brown, 2009; Carter, 2009; & Fraker, 2009).

**Promising Strategies**

**Career Academies**

Career academy models usually are “schools within schools programs, operating in high schools, offering career related curricula based on a career theme, academic coursework, and work experience through partnership with local employers” (U.S. Department of Education, 2006), though they can also be standalone school programs. MDRC (2009), in a research monograph, notes that career academies are associated with large earnings gains and positive effects on independent living and family stability. Ivry (2003) confirms that career academies show promise of effectiveness.

**Job Search**

Job search support seems to have a positive effect on earnings, and it does this by shortening duration of unemployment, rather than placing participants into higher paying jobs (D’Amico, 2006).

**Mentoring**

Mentoring relationships for young adults (age 23-28) appear to have an impact on full-time employment, according to McDonald (2007), who reviewed panel data for information about key elements related to full-time employment for youth. However, mentoring may not be as effective for young women as it is for young men in attaining employment. Ivry (2003) confirmed the importance of mentoring, noting that the Big Brothers Big Sisters mentoring model positively affected school performance and reduced substance use for mentees; see de Anda’s (2001) research supporting the value of mentoring in employment and educational outcomes.

**Skill Building**

Results for youth for skill building are very inconsistent, as are work experience and on-the-job training (D’Amico, 2006). It is clear that basic skills training in the classroom is not effective for either youth or adults, but there is uncertainty about what combination of vocational, on-the-job, occupational or other training results in the best outcomes for youth. In Pathways to Prosperity (Symonds, 2011), this issue is taken up, and an argument is made for
completely rethinking high school and career technical education, suggesting that current systems in the U.S. are not readying youth for employment. The author suggests that secondary school reform and the creation of systems modeled on the high-quality technical education that is standard in Europe may allow for the creation of the multiple pathways needed to meet the needs of youth in connecting with meaningful education, training, and employment.

**Characteristics of Effective Service Providers**

Some researchers have considered factors other than program or service characteristics that support positive outcomes in youth employment efforts. For example, Brown (2006) examined organizational characteristics of programs that were able to deliver effective youth employment approaches. Strong management, a comprehensive programmatic approach to working with youth, a focus on competencies that help youth succeed in education and work, and the ability to measure success are key organizational competencies that underlie effective service to youth. In related work, Larsen (2010) explored the characteristics of effective networks of providers. She concludes that successful youth service delivery networks are characterized by collaboration across systems, selection of an intermediary organization or network partner with responsibility for leading the coordination of collaborative or network activities, and the adoption of shared metrics or indicators to encourage shared accountability.

**Obesity Prevention**

Because the SCYEC’s youth work crews are engaging in active outdoor labor, the potential exists for an impact on obesity for those outdoor workers. The research supports the possibility, though not the certainty, of an impact on obesity prevention. Mahoney (2011), in a large study of panel data, found that youth (ages 10-18) whose summers included physically active planned activities showed lower obesity rates up to five years later. A comparison of employed and unemployed 12th grade girls (Dowda, 2007) indicated that while employed youth were more active than the unemployed, this was not associated with lowered obesity rates as measured by body mass index (BMI). Hadley (2010), in a review of effective strategies for obesity treatment and prevention, notes that for individual interventions, physical activity programs tended to be effective for youth age 12-17, while weight loss programs are effective for older adolescents, 16-19 years. Programs that are focused on one approach are more effective than those that use multiple strategies, and longer-term (six months or more) programs related to physical activity are more effective than those of shorter term. These findings are in contrast to Swinburn’s research summary (2008) indicating that the majority of the obesity epidemic can be attributed to increased energy intake (that is, increased calories) and not to reduced physical activity. If this is the case, then the physical activity of outdoor crew work might not affect obesity levels for youth. Calculating youths’ body mass index (BMI) is a reliable way to determine obesity, though it is considered a proxy rather than a direct measure (Centers for Disease Control and Prevention, 2011). Accurate weight and height measurements are required in order to calculate BMI.

**Environmental Education**

Environmental education programming for youth does not have an evaluation or evidence record that describes elements of effectiveness or links to employment or other education outcomes (Carleton-Hug, 2009). Carleton-Hug particularly cautions educators to align curriculum with desired program or educational outcomes.

**Evaluation Methodology**

The body of literature on youth employment offers insights into potential process and impact measures for the SCYEC local evaluation.

**Follow-up periods post-intervention for tracking interventions**

Follow-up periods for tracking impacts of employment interventions ranged from less than one year to nine years (Schirm, 2003; D’Amico, 2006; Maguire, 2010), with the most frequent follow-up taking place from two to five years. Schochet (2008) conducted surveys at baseline (after random assignment), and repeated the surveys at 12 months, 30 months, and 48 months after random assignment.
Methods of long-term follow-up data collection
Baseline and follow-up interviews in Schochet’s research were conducted both in-person and by telephone. For a ten-site juvenile justice systems change effort (Reclaiming Futures, a Robert Wood Johnson Foundation initiative), researchers surveyed expert informants in the intervention communities at six-month intervals over a three-year period, since collection of cross-site administrative data was not feasible given the limitations of existing data systems, and the variation (purposeful) of the intervention from site to site (Butts, 2007).

Methods for tracking earnings impacts
Administrative (unemployment insurance) records were used almost without exception to calculate earnings (Hollenbeck, 2005), though Schochet (2008) also used annual summary earnings records from the Internal Revenue Service to capture earnings information by some groups that are not covered by unemployment insurance records. Earnings were measured in a variety of ways, including by month and by year, and hourly wage levels and the presence of benefits, as well as total or mean earnings in a calendar year prior to baseline. Employment levels were measured as ever employed over a certain period and months employed over a certain period (Maguire, 2010). Bellotti (2010) measured weeks worked, and hours per week worked.

Methods for tracking criminal justice system involvement
Coldren (1989) noted that self-report of involvement in the criminal justice system was closely correlated with actual involvement. This implies that asking participants for information about criminal justice involvement (as opposed to obtaining records) is likely to yield valid results. Schochet (2008) used self-reported arrest history (“ever arrested” and “arrested for serious crimes” [aggravated assault, murder, robbery and burglary]) and convictions in a randomized controlled trial evaluating the effectiveness of Job Corps.

Secondary and postsecondary education and training measurement
Educational impacts tracked or recommended by policy experts: Valentine, (2009), notes that high school grades, attendance and test scores have little relationship to employment or earnings immediately after high school (Valentine, 2009). Furthermore, postsecondary education of less than a year does not affect earnings (Valentine, p. 8). Student retention and persistence in postsecondary education or training is one measure of successful transition, and Sum collected data on years of postsecondary education (Center for Labor Market Studies, 2009).

Outcome measures
The National Youth Employment Coalition created a set of outcome measures and their definitions for use by researchers in understanding outcomes in youth employment. These include basic skills gains, GED and high school diploma attainment, placement in post secondary education or in advanced or occupational training, postsecondary degree attainment, advanced or occupational training credential attainment (NYEC, undated), and reenrollment in secondary education (high school diploma or GED Programs) (Center for Labor Market Studies, 2009).
References Consulted During the Evaluation


Information Collected from Each Youth

During the 2011 SCYEC, there were seven different evaluation surveys for youth, two for crew leaders, and one for host sites. For this evaluation, information from the youth surveys and host site surveys was used. The evaluation plan was a good start for the first evaluation year. However, because it was a lot of information, only 49% of youth completed all seven expected surveys. The evaluation plan will be simplified and more targeted to the logic model for future evaluation years. The quantitative information from the youth surveys is listed below.

<table>
<thead>
<tr>
<th>Intake Form</th>
<th>Beginning of Summer Survey</th>
<th>End of Summer Survey</th>
<th>Skills Assessments 4 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Name</td>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Name</td>
<td>DOB</td>
<td>DOB</td>
<td>Date evaluation completed</td>
</tr>
<tr>
<td>Address</td>
<td>Gender</td>
<td>Participation in SCYEC in 2009 and/or 2010</td>
<td>Skill level assessed by supervisor for 16 skills</td>
</tr>
<tr>
<td>SS#</td>
<td>Agency</td>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>School Information</td>
<td>Worksite</td>
<td>Disability</td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>Orientation</td>
<td>IEP</td>
<td></td>
</tr>
<tr>
<td>Work History</td>
<td>Legal Rights</td>
<td>Whether or not completed summer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participation in SCYEC in 2009 and/or 2010</td>
<td>Safety training received related to 4 safety topics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enough training before using a new tool</td>
<td>Crew members took safety seriously</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enough training before starting new project</td>
<td>Had safety concerns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enough supervision</td>
<td>Ways I spent the money I earned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ways I plan to spend the money I earned</td>
<td>Being in this program has helped me start to think about what I will do in my future career</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCYEC helpful in building job skills</td>
<td>The work that I have done in this program has helped me understand local environmental issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCYEC helpful in building future employability</td>
<td>SCYEC changed my educational and/or future goals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crew leader/Supervisor completed worksite evaluation</td>
<td>Self assessment of skills worked on during summer for 9 skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crew leader/Supervisor reviewed worksite evaluation with me</td>
<td>Would return to SCYEC if offered again</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worksite evaluation useful</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enough work to do</td>
<td></td>
<td></td>
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<td></td>
<td>Enough time to do the work</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational components valuable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall satisfaction with SCYEC</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SCYEC was a valuable experience for me</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information visit [http://youthecologycorps.org/](http://youthecologycorps.org/)
In addition to the quantitative information listed in the above table, there were 18 open-ended questions asked throughout the summer.

1. Can you give me an example of the type of work you do here?
2. What do you plan to spend your paycheck on?
3. If there is an issue/concern, who would you feel most comfortable talking to about it?
4. How helpful do you think this program is in building your job skills?
5. How helpful was this program in building your ability to be employed?
6. What do you like best about the program?
7. Do you have any recommendations to improve the program?
8. What is the one thing that you did during the summer in this program that you are most proud of?
9. What did you like best about the program?
10. What did your crew leader or supervisor do to help you in your SCYEC job this summer?
11. Did you have safety concerns? If yes, what were your concerns?
12. How did your crew leaders respond to safety concerns or safety incidents on the job?
13. What will you do in the fall after the SCYEC program ends?
14. Has the SCYEC changed the goals you have for your education or for future work? If so, how?
15. Comments on the workday length.
16. Can you give me an example of something you’ve learned?
17. Anything else you’d like to add?
18. Notes

Finally, the surveys had additional information that was not used for this evaluation because

- The response rate was extremely low (only a few youth answered the question).
- It was an open ended question for a numeric answer and the youth answered in so many different ways that it was not possible to do a quantitative analysis. For instance, for the question, “How often do you have contact with your crew leader?” some youth gave answers like “every 2 weeks” and others gave answers such as, “A lot.”
- All the answers were the same, for instance, “Did you receive your check on time?”
- The information was not related to the logic model.
Content Analysis
Throughout the summer, youth were asked to complete seven different surveys. On each, they were asked a variety of open-ended questions to solicit their opinions about SCYEC. Because so many of the questions were similar across surveys, all comments were analyzed as a whole (in other words, they were not analyzed question by question). Sixteen youth (8%) did not answer any of the open-ended questions. The remaining 176 youth (92%) provided at least one written comment. Analysis of the youth comments identified the following five key areas.

- What I liked about SCYEC
- My plans for the Fall
- Suggestions to improve SCYEC
- What I learned in SCYEC
- My long-term plans

Analysis of the youth comments identified 32 different themes within these five key areas. These themes are listed in the table below. The 176 youth who provided written comments made a range of one to thirteen comments. On average, youth commented on seven different themes. The following table (over three pages) also identifies whether or not youth had different opinions about a key area or theme based on demographics. Opinions ranged most widely based on youth’s job assignment (outdoor crew or individual placement) followed by whether or not the youth had a special need. Differences by gender, age, race, and prior SCYEC experience were uncommon. Discussions about these themes, representative comments, and the differences by demographic category are integrated throughout the report where appropriate.

<table>
<thead>
<tr>
<th>Theme</th>
<th># (%)</th>
<th>Statistically Significant Differences by Demographic ($p \leq 0.05$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td>Number of key areas or themes with differences in opinion by the demographic (out of 37 themes)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Theme</td>
<td># (%)</td>
<td>Statistically Significant Differences by Demographic (p≤.03)</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>Age</td>
</tr>
<tr>
<td><strong>What I liked about SCYEC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. How my supervisor responded to safety concerns</td>
<td>174 (91%)</td>
<td>No</td>
</tr>
<tr>
<td>2. The opportunity to have a job</td>
<td>110 (57%)</td>
<td>No</td>
</tr>
<tr>
<td>3. I loved SCYEC!</td>
<td>109 (57%)</td>
<td>No</td>
</tr>
<tr>
<td>4. Serving my community</td>
<td>88 (46%)</td>
<td>No</td>
</tr>
<tr>
<td>5. Working in a team</td>
<td>76 (40%)</td>
<td>No</td>
</tr>
<tr>
<td>6. Learning a work ethic</td>
<td>71 (37%)</td>
<td>No</td>
</tr>
<tr>
<td>7. Working outside</td>
<td>61 (32%)</td>
<td>No</td>
</tr>
<tr>
<td>8. Relationships I developed</td>
<td>57 (30%)</td>
<td>No</td>
</tr>
<tr>
<td>9. Earning income</td>
<td>55 (29%)</td>
<td>No</td>
</tr>
<tr>
<td>10. I appreciated the opportunity to learn on the job</td>
<td>44 (23%)</td>
<td>No</td>
</tr>
<tr>
<td>11. Learning how to be on time</td>
<td>37 (19%)</td>
<td>No</td>
</tr>
<tr>
<td>12. Learning about safety hazards</td>
<td>21 (11%)</td>
<td>No</td>
</tr>
<tr>
<td>13. Working with children</td>
<td>17 (9%)</td>
<td>No</td>
</tr>
<tr>
<td>14. Improving my communication skills</td>
<td>5 (3%)</td>
<td>No</td>
</tr>
<tr>
<td><strong>My plans in the fall</strong></td>
<td>148 (77%)</td>
<td>No</td>
</tr>
<tr>
<td>1. Going to school</td>
<td>110 (57%)</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Going to work</td>
<td>76 (40%)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Suggestions for improvement</strong></td>
<td>134 (70%)</td>
<td>No</td>
</tr>
<tr>
<td>1. No suggestions for improvement</td>
<td>72 (38%)</td>
<td>No</td>
</tr>
<tr>
<td>2. More hours</td>
<td>50 (26%)</td>
<td>No</td>
</tr>
<tr>
<td>3. Other ideas</td>
<td>24 (13%)</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Higher pay</td>
<td>21 (11%)</td>
<td>No</td>
</tr>
<tr>
<td>5. More and better tools</td>
<td>9 (5%)</td>
<td>No</td>
</tr>
<tr>
<td>6. More diversity in worksites</td>
<td>8 (4%)</td>
<td>No</td>
</tr>
<tr>
<td>Theme</td>
<td># (%)</td>
<td>Gender</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>What I learned in SCYEC</td>
<td>91 (47%)</td>
<td>No</td>
</tr>
<tr>
<td>1. About plants</td>
<td>35 (18%)</td>
<td>No</td>
</tr>
<tr>
<td>2. About our water systems</td>
<td>27 (14%)</td>
<td>No</td>
</tr>
<tr>
<td>3. About the environment in general</td>
<td>15 (8%)</td>
<td>No</td>
</tr>
<tr>
<td>4. About decomposition</td>
<td>14 (7%)</td>
<td>No</td>
</tr>
<tr>
<td>5. About fish and fish habitat</td>
<td>12 (6%)</td>
<td>No</td>
</tr>
<tr>
<td>6. About food and food production</td>
<td>8 (4%)</td>
<td>No</td>
</tr>
<tr>
<td>My long-term plans</td>
<td>80 (41%)</td>
<td>No</td>
</tr>
<tr>
<td>1. SCYEC did impact my plans</td>
<td>37 (19%)</td>
<td>No</td>
</tr>
<tr>
<td>2. SCYEC did not change my plans</td>
<td>19 (10%)</td>
<td>No</td>
</tr>
<tr>
<td>3. I do want to work in an environmental job</td>
<td>17 (9%)</td>
<td>No</td>
</tr>
<tr>
<td>4. I do not want to work in this field</td>
<td>16 (8%)</td>
<td>No</td>
</tr>
</tbody>
</table>

NOTES
- A “Yes” in the Statistically Significant Differences by Demographic column indicates a statistically significant difference. It does NOT indicate whether or not youth in the demographic category commented on the theme. Youth in every category commented on every theme. The actual differences between demographic groups are integrated in the report.
- Gender options on survey were “male” or “female.”
- Age categories are 14-15, 16-17, and 18-21.
- The race question on the survey was open-ended. Answers were categorized into three categories: Latino, White, of Other.
- Job indicates an assignment in an Outdoor Crew or an Individual Placement.
- Prior SCYEC indicates whether or not a youth participated in SCYEC in a prior year.
- Special Needs includes youth who have an IEP and/or a disability.
**Statistical Analysis**

Throughout the summer, youth were asked to complete seven different surveys. All together, they were asked 86 quantitative items measured (for instance, age or questions with pre-set answer choices). These items were analyzed by demographic groups to learn if youth in different demographic groups had different opinions about the SCYEC or experiences with the SCYEC.

<table>
<thead>
<tr>
<th>Question</th>
<th>Statistically Significant Differences by Demographic ($p \leq .03$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
</tr>
<tr>
<td>1. Gender</td>
<td>NA</td>
</tr>
<tr>
<td>2. Age</td>
<td>No</td>
</tr>
<tr>
<td>3. Race</td>
<td>No</td>
</tr>
<tr>
<td>4. Job</td>
<td>No</td>
</tr>
<tr>
<td>5. Prior SCYEC experience</td>
<td>No</td>
</tr>
<tr>
<td>6. Special Needs</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Selection or Completion</strong></td>
<td></td>
</tr>
<tr>
<td>1. Selected for program</td>
<td>No</td>
</tr>
<tr>
<td>2. Completed summer</td>
<td>No</td>
</tr>
<tr>
<td>3. Did not complete summer</td>
<td>No</td>
</tr>
<tr>
<td><strong>Funder</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enough training about starting a new project</td>
<td>No</td>
</tr>
<tr>
<td>2. Enough training about using a new tool</td>
<td>No</td>
</tr>
<tr>
<td>3. Enough training about using tools safely</td>
<td>No</td>
</tr>
<tr>
<td>4. Enough training about hazards in the work environment</td>
<td>No</td>
</tr>
<tr>
<td>5. Enough training about dehydration</td>
<td>No</td>
</tr>
<tr>
<td>6. Enough training about heat exposure</td>
<td>No</td>
</tr>
<tr>
<td>7. Crew members took safety seriously</td>
<td>No</td>
</tr>
<tr>
<td>8. Enough supervision on site</td>
<td>No</td>
</tr>
</tbody>
</table>

For more information visit [http://youthecologycorps.org/](http://youthecologycorps.org/)
<table>
<thead>
<tr>
<th>Question #</th>
<th>Work Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Crew leader/supervisor completed worksite evaluation</td>
</tr>
<tr>
<td>2.</td>
<td>Crew leader/supervisor reviewed worksite evaluation</td>
</tr>
<tr>
<td>3.</td>
<td>Worksite evaluation was useful</td>
</tr>
<tr>
<td>4.</td>
<td>SCYEC helped build my job skills</td>
</tr>
<tr>
<td></td>
<td><strong>First Skills Assessment</strong> (151 youth who had first assessment in June and 4th assessment in August)</td>
</tr>
<tr>
<td>1.</td>
<td>Demonstrates the willingness to work</td>
</tr>
<tr>
<td>2.</td>
<td>Demonstrates integrity</td>
</tr>
<tr>
<td>3.</td>
<td>Demonstrates promptness</td>
</tr>
<tr>
<td>4.</td>
<td>Avoids absenteeism</td>
</tr>
<tr>
<td>5.</td>
<td>Avoids language that stereotypes others</td>
</tr>
<tr>
<td>6.</td>
<td>Maintains appropriate grooming and hygiene</td>
</tr>
<tr>
<td>7.</td>
<td>Is respectful of the opinions of others</td>
</tr>
<tr>
<td>8.</td>
<td>Takes responsibility for own work</td>
</tr>
<tr>
<td>9.</td>
<td>Demonstrates willingness to learn</td>
</tr>
<tr>
<td>10.</td>
<td>Works well with others as part of team</td>
</tr>
<tr>
<td>11.</td>
<td>Follows safety procedures</td>
</tr>
<tr>
<td>12.</td>
<td>Communicates in English</td>
</tr>
<tr>
<td>13.</td>
<td>Reads and understands written information</td>
</tr>
<tr>
<td>14.</td>
<td>Computer skills</td>
</tr>
<tr>
<td>15.</td>
<td>Customer service skills</td>
</tr>
<tr>
<td>16.</td>
<td>Basic math</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Statistically Significant Differences by Demographic ($p \leq 0.05$)</th>
<th>Gender</th>
<th>Age</th>
<th>Race</th>
<th>Job</th>
<th>Prior SCYEC</th>
<th>Special Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Question</td>
<td>Statistically Significant Differences by Demographic ($p \leq 0.03$)</td>
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<tr>
<td></td>
<td>Gender</td>
<td>Age</td>
<td>Race</td>
<td>Job</td>
<td>Prior SCYEC</td>
<td>Special Needs</td>
</tr>
<tr>
<td>Last Skills Assessment</td>
<td>(151 youth who had first assessment in June and 4th assessment in August)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. Demonstrates the willingness to work</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2. Demonstrates integrity</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3. Demonstrates promptness</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4. Avoids absenteeism</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5. Avoids language that stereotypes others</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6. Maintains appropriate grooming and hygiene</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7. Is respectful of the opinions of others</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8. Takes responsibility for own work</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>9. Demonstrates willingness to learn</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10. Works well with others as part of team</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>11. Follows safety procedures</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>12. Communicates in English</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>13. Reads and understands written information</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>14. Computer skills</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>15. Customer service skills</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>16. Basic math</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Change in Skills from First to Last Assessment</td>
<td>(151 youth who had first assessment in June and 4th assessment in August)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Demonstrates the willingness to work</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2. Demonstrates integrity</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3. Demonstrates promptness</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4. Avoids absenteeism</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<td>5. Avoids language that stereotypes others</td>
<td>No</td>
<td>No</td>
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<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6. Maintains appropriate grooming and hygiene</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7. Is respectful of the opinions of others</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>8. Takes responsibility for own work</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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### Question

<table>
<thead>
<tr>
<th>9. Demonstrates willingness to learn</th>
<th>Statistically Significant Differences by Demographic (p≤.03)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Age</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

| 10. Works well with others as part of team | | |
| Yes | No | Yes | No | No | No |

| 11. Follows safety procedures | | |
| Yes | No | Yes | Yes | No | No |

| 12. Communicates in English | | |
| No | No | No | No | No | No |

| 13. Reads and understands written information | | |
| No | No | No | Yes | No | No |

| 14. Computer skills | | |
| No | No | No | No | No | No |

| 15. Customer service skills | | |
| No | No | No | No | No | No |

| 16. Basic math | | |
| No | No | No | Yes | No | No |

### Income

| 1. Spent income on savings | No | No | No | No | No | No |
| 2. Spent income on household expenses | No | No | Yes | No | No | No |
| 3. Spent income on clothes | No | No | No | No | No | No |
| 4. Spent income on school | No | No | Yes | No | No | No |
| 5. Spent income on entertainment | No | Yes | No | No | No | Yes |
| 6. Spent income on car | No | Yes | Yes | No | No | No |
| 7. Spent income on court-ordered fines | No | No | Yes | No | No | No |

### Planning for the Future

| 1. SCYEC helped me think about my future career | No | No | No | No | No | No |
| 2. SCYEC has changed my goals for the future | No | No | No | No | No | No |

### Youth Satisfaction

<p>| 1. Had enough work to do | No | No | No | No | No | No |
| 2. Education component was valuable | No | No | No | No | No | No |
| 3. Would return to SCYEC | No | No | No | No | No | No |
| 4. SCYEC was a valuable experience | No | No | No | No | No | No |
| 5. Overall, was satisfied | No | No | No | No | No | No |
| 6. Four-hour workday was long enough | No | No | No | No | No | No |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Statistically Significant Differences by Demographic ($p \leq 0.05$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td>Environmental Education</td>
<td></td>
</tr>
<tr>
<td>1. Helped me understand local environmental issues</td>
<td>Yes</td>
</tr>
</tbody>
</table>

NOTES
- A “Yes” in the Statistically Significant Differences by Demographic column indicates a statistically significant difference. **It does NOT indicate whether or not youth in the demographic category commented on the theme.** Youth in every category commented on every theme. The actual differences between demographic groups are integrated in the report.
- Gender options on survey were “male” or “female.”
- Age categories are 14-15, 16-17, and 18-21.
- The race question on the survey was open-ended. Answers were categorized into three categories: Latino, White, of Other.
- Job indicates an assignment in an Outdoor Crew or an Individual Placement.
- Prior SCYEC indicates whether or not a youth participated in SCYEC in a prior year.
- Special Needs includes youth who have an IEP and/or a disability.