Editor’s Comments:
Readers will find several outstanding program models and research strategies in our Spring 2013 Issue. Highlights include examination of a new Science Process Skills Inventory and its usefulness for measuring science inquiry skill development in youth science programs, an exploration of online learning environments and the examination of project based learning within the afterschool environment.

Manuscripts for the Winter 2013 and Spring 2014 issues are now being accepted in the following areas:

- **Feature Articles** ~ informational, explanatory, or critical analysis and interpretation of major trends in the field or comprehensive reviews. Include clear implications for youth development research, practice and programming. 2,000-5,000 words
- **Program Articles** ~ discuss programs and outcomes or describe promising programs and pilot projects that have clear implications for youth development research, practice and programming. 1,500-4,000 words
- **Research and Evaluation Strategies** ~ describe innovative methodologies and strategies in the collection and analysis of quantitative or qualitative research and evaluation data. 1,500-4,500 words
- **Resource Reviews** ~ present analyses of materials, such as books, curricula or videos. 300-800 words

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Feature Articles

Measuring Science Inquiry Skills in Youth Development Programs: The Science Process Skills Inventory [Article 130801FA001] ................................................................. Page 4
Arnold, Mary E.; Bourdeau, Virginia D.; Nott, Brooke D.

In recent years there has been an increased emphasis on science learning in 4-H and other youth development programs. In an effort to increase science capacity in youth, it is easy to focus only on developing the concrete skills and knowledge that a trained scientist must possess. However, when science learning is presented in a youth-development setting, the context of the program also matters. This paper reports the development and testing of the Science Process Skills Inventory (SPSI) and its usefulness for measuring science inquiry skill development in youth development science programs. The results of the psychometric testing of the SPSI indicated the instrument is reliable and measures a cohesive construct called science process skills, as reflected in the 11 items that make up this group of skills. The 11 items themselves are based on the cycle of science inquiry, and represent the important steps of the complete inquiry process.

Light, Mark; Falkenthal, Jessica

The manner that young people and adults are communicating with each other is rapidly changing in society that is, in part, driven by the latest technology. As a youth-driven program, we must engage in new strategies and methods by which we communicate with youth members, volunteers, families, and the community at large. Social and mobile media are a growing and popular venue for much of our target audience and youth development practitioners must learn how to leverage these networks to create positive youth development in online environments.

If we ignore and don’t engage in the opportunity to be connected to youth online, then youth are left to make their own paths online and set the online norms. As youth organizations, we also must seize the opportunity to be online mentors and use the resources that are available and being used by our target populations.

The Effects of Non-Academic Mentoring on School-Related Cognitions: A Pilot Study [Article 130801FA003] ........................................................................................................ Page 27
MacArthur, Stacey S.; Higginbotham, Brian J.; Ho, Edward

Mentoring has been shown to positively influence various youth outcomes and developmental assets. The 4-H Mentoring: Youth and Families with Promise (4-H YFP) program is a multi-component program designed to enhance individual, familial, and social assets of at-risk youth. This pilot study examines the effects of participation in the 4-H YFP program on school-related cognitions. Data were collected on 20 mentored at-risk youth and 18 waiting list youth. RMANOVA analyses identified significant differences on one scale and expected trends on five additional scales. Ecological systems theory is used to inform the interpretation of results.
Higher education costs have increased substantially over the past two decades and, therefore, student loan debt has increased as well. Studies have shown that one earns more money over one’s lifetime if he/she has a four-year college degree. In fact, it is often substantially more depending upon one’s profession. However, for some individuals, the costs of funding higher education may be confusing and often times overwhelming. A study was completed at a university in the Pacific Northwest (n=778) which asked college students about their financial behaviors, credit card debt, student loan debt, discussions with parents, and in what topics or workshops they would like more information. Based on this data, faculty and graduate students from the School of Family and Consumer Sciences and staff from the student financial aid office are creating workshops and curriculum to assist students in managing their debt and finances.

“...and my World:” Perceptions of County Educators and Volunteers toward International 4-H Programs [Article 130801FA005]…………………………………………………………………..Page 47
Sallee, Jeff; Lancaster, Sarah
The phrase “...and my world” was added to the 4-H pledge in 1973, forever solidifying 4-H's commitment to international programming and global citizenship. In 2008, Oklahoma 4-H began to consider revitalizing its international outreach. After researching the barriers to International 4-H projects, Oklahoma 4-H educators and volunteers were surveyed to discover their interests in this area with the intent of beginning a renewed International 4-H program with educator and volunteer support. The survey results indicate that 4-H volunteers and youth educators prefer short term International educational programs that focus on cultural awareness and service-learning for older youth.

Program Articles
MacFarlane, Emily; Chauveron, Lisa M.; Thompkins, Amanda C.
The Leadership Program’s HERstory is a school-based, universal, preventative intervention designed to promote healthy youth development among adolescent girls by increasing their connections to pro-social peers and to school and community while developing social-emotional skills that serve as protective factors. In this school-year-long program, a facilitator implements three program phases: group development activities in Community Building, self-reflective Writing Workshop exercises, and a final Creative Output project, an ethnographic theater production or literary journal developed from participants' Writing Workshop responses. The current mixed-methods study presents early evidence of program effectiveness based on focus groups and school record data review at two NYC public schools during the 2010-2011 school year. Participants reported improvements in key areas targeted by HERstory, including peer connectedness, academic achievement, and a range of protective factors including future orientation and goal setting. Results suggest this program approach may be suitable promoting healthy adolescent development for girls.

The Value of Relevant, Project-Based Learning to Youth Development [Article 130801PA002] ……………………………………………………………………..Page 64
Schwartz, Kerry; Tessman, Darcy; McDonald, Daniel
Project Based Learning models present authentic learning opportunities with real-life situations, enabling students to set their own learning goals and forge their own relationships (Barab, et al., 2001). The autonomy inherent in this model allows youth to bring their skills and experiences to
real situations and to be seen as valued community members. This article describes a project-
based learning model involving “externs,” who developed and implemented sustainability projects
in their communities. Externs worked with Cooperative Extension professionals on locally relevant
community projects during the summer of 2011 in three Arizona counties. The project based
learning experience had a positive impact on the lives of our three externs.

Utilizing 4-H in Afterschool Settings: Two Approaches for Integration
[Article 130801PA003] ..........................................................Page 71
Rudd, Rachel; Brower, Naomi
As our communities grow and change, afterschool programs represent an avenue to bring
resources to populations which would otherwise not be available to them. Combining 4-H with the
afterschool environment can be beneficial in supporting and raising the quality of afterschool
programs being offered. This article explores the benefits and challenges of two approaches of
implementing 4-H programming in afterschool settings: the 4-H managed program that is created
and run solely by 4-H faculty and staff and the 4-H afterschool partnerships which are facilitated in
partnership with existing afterschool programs. Regardless of the approach, combining 4-H with
afterschool programs can strengthen well established programs and can enhance the quality of all
afterschool programs.

Research and Evaluation Strategies
Self-Esteem and Feelings of Community Connectedness of At-Risk Adolescents
Attending Community-Based Afterschool Programs [Article 130801RS001] ......Page 78
Loughlin, Tina; Barnett, Rosemary V.; Culen, Gerald R.; Stedman, Nicole L.P.; Payne-Purvis,
Caroline
This research investigated the relationship between adolescent afterschool program attendance,
self-esteem and feelings of community connectedness. Thirty-nine of the 61 at-risk adolescents
enrolled in two federally funded, community based afterschool programs participated in the study.
Participants completed a 10-item self-esteem questionnaire and a 5-item section of the Youth
Involved in Community Issues Survey (YICI) to measure perceptions of community connectedness.
Attendance records were also collected from the sites. Data were analyzed using Pearson
Correlations.

Results indicated that there was not a significant relationship between the total variables. The
individual item analysis, however, did find a significant relationship between adolescent community
connectedness and self esteem items. Findings suggest that there is a relationship to be explored
and strengthened through means of community outreach for adolescents.

Conclusions from this study have important implications for youth practice. Specifically, program
leaders need to help adolescents get involved in the community as contributing members.

Resource Review
The 8th Habit (2004) [Article 130801RR001] ..........................................................Page 91
Arnett, Nate
Youth development professionals are on the leading front in helping to prepare our youth and
volunteers for success in the information or knowledge worker age. As such, these professionals
are being subjected to tremendous changes in their individual and professional lives amidst the
current economic challenges. The 8th Habit (2004) by Covey is a resource that youth development
professionals can use to improve themselves as “whole persons” and help inspire those they serve
to reach their potential, thus enhancing our communities and organizations
Measuring Science Inquiry Skills in Youth Development Programs: The Science Process Skills Inventory

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Measuring Science Inquiry Skills in Youth Development Programs: The Science Process Skills Inventory

Mary E. Arnold, Virginia D. Bourdeau and Brooke D. Nott
Oregon State University

Abstract: In recent years there has been an increased emphasis on science learning in 4-H and other youth development programs. In an effort to increase science capacity in youth, it is easy to focus only on developing the concrete skills and knowledge that a trained scientist must possess. However, when science learning is presented in a youth-development setting, the context of the program also matters. This paper reports the development and testing of the Science Process Skills Inventory (SPSI) and its usefulness for measuring science inquiry skill development in youth development science programs. The results of the psychometric testing of the SPSI indicated the instrument is reliable and measures a cohesive construct called science process skills, as reflected in the 11 items that make up this group of skills. The 11 items themselves are based on the cycle of science inquiry, and represent the important steps of the complete inquiry process.

Outcomes of Science-Based Youth Development Programs: What to Measure?

In recent years there has been an increased emphasis on science learning in 4-H youth development programs. Science has been identified as one of the three “Mission Mandate” areas for the 4-H program nationally. This emphasis was highlighted by the call from National 4-H to have one million youth who have never been in 4-H before enroll in 4-H Science programs (Mielke, LaFleur, & Sanzone, 2010). While youth involved in 4-H projects have been engaged in science-related endeavors for years, the formal call to increase science programming has changed the face of 4-H programs across the country. Since 2006, 4-H has invested considerable resources in the advancement of science learning, and a recent report by external evaluators of the 4-H Science initiative indicated there is “encouraging growth and variety” of science programs across the 4-H program (Riley & Butler, 2012). Typically, outcomes for youth participants in community-based
science programs fall into one of five categories: (1) Awareness, knowledge, or understanding; (2) engagement or interest; (3) attitude; (4) behavior; and (5) skills (Dierking, 2008). Knowledge refers to what a youth understands and comprehends in relation to science, engagement considers the extent to which youth are excited and involved in science learning, while attitude considers the quality of one's long-term perspectives toward science. Behavior refers to actions that youth take as a result of participating in science programs, and skills reflect one’s ability to conduct procedures related to science and science inquiry (Dierking, 2008). While these five categories provide a lucid way to conceptualize the potential outcomes of 4-H science programs, there is general recognition that the categories are not exclusive; programs most likely focus intentionality on more than one category at a time, and the development of outcomes across categories is a likely outcome for most youth science programs. Consider for example, a program that emphasizes increasing science skills. Done well, this program will also increase youth engagement, attitudes, and potential behavior. The key to this cross-category benefit lies in the phrase done well. What contributes to a youth science program that is done well?

Learning Science in a Youth Development Program Context
In an effort to increase science capacity in youth, it is easy to focus on the content that youth need to learn. That is, to focus on the concrete skills and knowledge that a trained scientist must possess. However, when science learning is presented in a youth-development setting, the context of the program also matters (Campbell, 2008; Horton, Gogolski, & Warkenstein, 2008). Positive youth development (PYD) programs such as 4-H embrace eight well-defined program setting elements that serve to distinguish PYD programs from other programs where the focus is not primarily on youth development (Eccles & Gootman, 2002). These elements are:

1) a positive relationship with a caring adult;
2) a physically and emotionally safe environment;
3) opportunities for mastery;
4) opportunities to value and practice service to others;
5) opportunities for self-determination;
6) an inclusive environment;
7) opportunities to see oneself as an active participant in the future; and
8) engagement in learning.

Subsequently, it is important to consider the context of the program being conducted when measuring science skills in youth and community programs.

Available resources, skills of the facilitator, the atmosphere of the program, for example, are all important program contexts that influence ultimate program outcomes (Campbell, 2008).

Learning by Doing: A Natural Partnership with Science Inquiry
One of the long-standing program contexts for 4-H is that youth learn “by doing.” This is evidenced by the program’s embrace of the experiential learning model as a foundational principle for constructing youth learning experiences. This model, often referred to as “Do-Reflect-Apply,” has guided the pedagogical approach of 4-H educators and volunteers for many decades. The experiential learning model is based in part on the work of Kolb (1984) who argued that learning is a process, and that one’s ideas and thoughts are not fixed, but rather are “formed and re-formed” based on experience. Furthermore, Kolb claimed that learning cannot be defined by an “outcome” only. Kolb went on to highlight Bruner’s (1966) claim that the goal of education should be in the development of skills that are useful in gaining knowledge and understanding.
Learning then, is a process accomplished through multiple experiences. Likewise, science inquiry is a process of discovery, many times through multiple experiences, for even when an answer is reached, the answer itself leads to a new question to be asked. Science inquiry facilitates a learning process of establishing ideas, testing their merit, revising as needed, communicating results, and developing new questions. As such, the science inquiry process and experiential learning are quite similar, as demonstrated by Bourdeau (2003) in the 4-H Inquiry in Action model. This model overlays the experiential learning process and science inquiry and provides a clear picture of the natural fit of science and 4-H youth development (see Figure 1).

**Figure 1**
4-H Inquiry in Action
**Evaluating 4-H Science Programs: What to Measure?**

As mentioned earlier, there are five domains of science outcomes that are typically measured, of which skills related to science and science inquiry are one. While the other domains are all important in their own right and for their own goals, we argue that the process of doing science inquiry is a critical outcome for science learning conducted in the context of 4-H and other positive youth development settings. While building skills in science inquiry, we are building skills of learning through experience, and creating an atmosphere of learning that is consistent with the principles of positive youth development. To this end, we have developed and tested the Science Process Skills Inventory (SPSI) which has been requested for use in programs around the world to measure the development of science process skills. This paper presents the results of the psychometric testing of the SPSI with data collected between 2007 and 2011 from youth participants in a residential summer science camp.

**The Science Process Skills Inventory**

The Science Process Skills Inventory is an 11-item scale that mirrors the steps of the science inquiry process. Youth are prompted to respond to each statement using a 4-point Likert scale indicating how often they practice each of the items when doing science: Never (1), sometimes (2), usually (3), and always (4). Recommended scoring of the SPSI is the calculation of a composite science process skills score. This is calculated by summing the individual ratings for each item. The score range for the composite score is 11-44.

**SPSI Testing Participants**

The SPSI was used to collect data from 252 youth in sixth (80), seventh (86) and eighth (86) grades. Fifty percent were male. The ethnicity/race distribution of the participants was: Caucasian (35%); Hispanic (27%); Asian (11%); African-American (7%); Native American (7%); Pacific Islander (2%); Sub-Continent Indian (1%), mixed (8%), and other (1%). One youth did not report ethnicity. The youth participated in one of five science-focused residential camps held in the summers of 2007 through 2011. Fifty-nine youth participated in 2007, 48 youth participated in 2008, 47 youth participated in 2009, 50 youth participated in 2010, and 48 youth participated in 2011. These youth completed the SPSI pre and post-camp.

**Data Analysis Strategy**

Factor analysis using principal component analysis (PCA) was used to assess the latent structure of the SPSI pre and post-test scales. In PCA an extraction of the factors occurs and this method was used to determine if the set of items were measuring a single construct made of discreet science process skills. Eigenvalues (sum of the squared factor loadings) greater than one were used as the extraction method, with orthogonal (varimax) rotation, and scree plot tests to determine the factor solutions (i.e. the number of factors to be retained). Items loading on one factor above .40 are considered efficient factor loadings; thus, we used the .40 threshold (Kline, 2005). Identical PCAs were performed on both the pre and post-test scales and the results were compared.

The SPSI was also assessed in terms of internal-consistency reliability. Cronbach’s alpha measures the consistency of responses on the items and the correlations among the scale’s items should remain consistent, showing the SPSI items used are reliably measuring the science skills concept. To test for differences between possible groups within the sample, ANOVA analyses were also conducted.
Results
The factor analysis of the pre-test items revealed two eigenvalues above one (1.16 and 4.27); however, we also considered the scree plot of eigenvalues that showed a significant drop-off after the first component. After orthogonal (varimax) rotation eleven items loaded on two components (item 10 did not load on either factor above .40 but rather loaded on both factors at .38 and .34). Items 5, 6, & 7 had factor loadings above .68 on the second factor. These three items asked students questions specifically about their experience with data and students on average had higher scores on these three items compared to the other eight items in the scale. However, the analysis on the post-test items suggested the retention of one factor with one eigenvalue above 6 and the rest below .93. The principal component analysis after rotation on the post-test items also yielded one factor; all the items loaded on one factor above .67. The scree plot also confirmed a one-factor solution.

These results have interesting implications for the measurement of science processing skills. The post-test data were collected at the end of a two-week residential camp that focused heavily on developing science process skills in the context of a positive youth development program. As such, each step of the inquiry process was taught, utilized, and emphasized during the two-week camps. By the end of the camps, the SPSI appears to be measuring a more unified construct of science processing skills better than it did at the beginning of camp. Which is to say, that the better the program teaches the individual skills as part of a complete cycle of science inquiry, the better the SPSI will serve as a measurement of that construct. The correlations among the scales’ items are presented in Table 1 and 2. The results of the factor analyses are presented in Table 3 and 4.
Table 1
Correlations between Pre-test SPSI Items

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*p<.05; **p<.01; ***p<.001.
### Table 3
Summary of Exploratory Factor Analysis Results for Pre-test SPSI Following Orthogonal Rotation (n=204)

<table>
<thead>
<tr>
<th>Item</th>
<th>SPSI</th>
<th>DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Use scientific knowledge to form a question</td>
<td>.76</td>
<td>.28</td>
</tr>
<tr>
<td>Pre Ask question to be answered by collecting data</td>
<td>.54</td>
<td>.17</td>
</tr>
<tr>
<td>Pre Design a scientific procedure to answer question</td>
<td>.71</td>
<td>.20</td>
</tr>
<tr>
<td>Pre Communicate a scientific procedure</td>
<td>.55</td>
<td>.15</td>
</tr>
<tr>
<td>Pre Record data accurately</td>
<td>.28</td>
<td>.67</td>
</tr>
<tr>
<td>Pre Use data to create graph for presentation</td>
<td>.02</td>
<td>.85</td>
</tr>
<tr>
<td>Pre Create display of data</td>
<td>.23</td>
<td>.74</td>
</tr>
<tr>
<td>Pre Analyze results</td>
<td>.69</td>
<td>.25</td>
</tr>
<tr>
<td>Pre Use science terms to share results</td>
<td>.67</td>
<td>.24</td>
</tr>
<tr>
<td>Pre Use models to explain results</td>
<td>.40</td>
<td>.32</td>
</tr>
<tr>
<td>Pre Use results to answer questions</td>
<td>.63</td>
<td>.13</td>
</tr>
<tr>
<td><strong>Eigenvalues</strong></td>
<td>4.25</td>
<td>1.22</td>
</tr>
<tr>
<td><strong>% of variance</strong></td>
<td>38.68</td>
<td>11.11</td>
</tr>
</tbody>
</table>

*Note:* Factor loadings over .40 appear in bold.
Table 4
Summary of Exploratory Factor Analysis Results for Post-test SPSI Following Orthogonal Rotation (n=204)

<table>
<thead>
<tr>
<th>SPSI Item</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Use scientific knowledge to form a question</td>
<td>.76</td>
</tr>
<tr>
<td>Post Ask question to be answered by collecting data</td>
<td>.82</td>
</tr>
<tr>
<td>Post Design a scientific procedure to answer question</td>
<td>.79</td>
</tr>
<tr>
<td>Post Communicate a scientific procedure</td>
<td>.83</td>
</tr>
<tr>
<td>Post Record data accurately</td>
<td>.67</td>
</tr>
<tr>
<td>Post Use data to create graph for presentation</td>
<td>.71</td>
</tr>
<tr>
<td>Post Create display of data</td>
<td>.73</td>
</tr>
<tr>
<td>Post Analyze results</td>
<td>.82</td>
</tr>
<tr>
<td>Post Use science terms to share results</td>
<td>.77</td>
</tr>
<tr>
<td>Post Use models to explain results</td>
<td>.72</td>
</tr>
<tr>
<td>Post Use results to answer questions</td>
<td>.77</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>6.49</td>
</tr>
<tr>
<td>% of variance</td>
<td>58.98</td>
</tr>
</tbody>
</table>

Note: Factor loadings over .40 appear in bold.

Tests for internal reliability revealed a Cronbach’s alpha coefficient of .84 for the pre-test scale and .93 for the post-test scale. Alpha coefficients by camp year were also investigated (see Table 5 for the alpha coefficients by camp year).

Table 5
Summary of Alpha Coefficients for Pre and Post-test SPSI by Camp Year (n=252)

<table>
<thead>
<tr>
<th>Camp Year</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>.83</td>
<td>.94</td>
</tr>
<tr>
<td>2008</td>
<td>.85</td>
<td>.88</td>
</tr>
<tr>
<td>2009</td>
<td>.81</td>
<td>.92</td>
</tr>
<tr>
<td>2010</td>
<td>.85</td>
<td>.95</td>
</tr>
<tr>
<td>2011</td>
<td>.85</td>
<td>.91</td>
</tr>
<tr>
<td>All Years</td>
<td>.84</td>
<td>.93</td>
</tr>
</tbody>
</table>
ANOVA analyses were conducted to determine possible differences in the SPSI by gender, ethnicity, and grade level. These analyses were performed for the total scores on both the pre and post-tests. All tests for significance were deemed insignificant except one. A significant difference was found for grade levels on the post-test at the $p < .05$ level [$F(2, 241) = 3.60, p = .03$]. Post hoc comparisons using ANOVA contrasts indicated that the averages of grades 6 and 7 were significantly different compared to grade 8 scores. A significant difference was also found between grade 6 versus grade 8 (grade 6, $M = 35.74$, $SD = 5.93$; grade 8, $M = 38.12$, $SD = 5.37$). The pre and post-test mean scores by are presented in Table 6.

### Table 6
Means of SPSI Scores by Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Grade Six</th>
<th>Grade Seven</th>
<th>Grade Eight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPSI Score</td>
<td>$n = 64$</td>
<td>$n = 70$</td>
<td>$n = 70$</td>
</tr>
<tr>
<td>Pre-test</td>
<td>34.12</td>
<td>33.25</td>
<td>34.20</td>
</tr>
<tr>
<td>Post-test**</td>
<td>35.55</td>
<td>37.10</td>
<td>38.36</td>
</tr>
</tbody>
</table>

** post-hoc contrasts revealed significant differences between grades ($p < .05$)

### Discussion and Conclusion

Overall, the results of the psychometric testing of the SPSI indicated the instrument is reliable and measures a cohesive construct called science process skills, as reflected in the 11 items that make up this group of skills. The 11 items themselves are based on the cycle of science inquiry, and represent the important steps of the complete inquiry process.

In addition to providing support for the overall soundness of the SPSI, the psychometric testing revealed a couple other qualities of the SPSI that have important implications for using this measure. First, was the finding that the post-test cohesiveness of the SPSI was stronger than the pre-test. As noted, the post-test was given after a two-week intensive residential science camp that focused heavily on inquiry in a positive youth development setting. While we recognize that not all programs will have this level of intensity and dosage, the fact that the SPSI factored more strongly at the end of such an experience supports its use as an effective way to measure the development of science inquiry skills. In short, the more emphasis a program places on developing science inquiry skills, the better the SPSI will measure the presence of those skills.

The second important finding was the differences in scores between youth in the 6th, 7th, and 8th grades. One would expect that 8th grade youth will possess more science inquiry skills than younger youth, if for no other reason that the science curriculum of an 8th grader is usually more advanced than that for younger students. These grade-related differences were found at the pre-test time. However, all three grade groups reported stronger use of science processing skills at the end of camp, again with those in 8th grade having the strongest scores. Such findings support the ability of the SPSI to measure increases in skill level regardless of the student’s pre-program skill level.
Overall, the SPSI appears to perform well for measuring the development of science process skills in youth who participate in 4-H and other youth development programs that emphasize science inquiry.

References


Positive Youth Development in the 21st Century: Exploring Online Environments

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**Positive Youth Development in the 21st Century: Exploring Online Environments**

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**Abstract:** The manner that young people and adults are communicating with each other is rapidly changing in society that is, in part, driven by the latest technology. As a youth-driven program, we must engage in new strategies and methods by which we communicate with youth members, volunteers, families, and the community at large. Social and mobile media are a growing and popular venue for much of our target audience and youth development practitioners must learn how to leverage these networks to create positive youth development in online environments.

If we ignore and don’t engage in the opportunity to be connected to youth online, then youth are left to make their own paths online and set the online norms. As youth organizations, we also must seize the opportunity to be online mentors and use the resources that are available and being used by our target populations.

**Introduction**

**Need for an Online Presence**  
Currently youth are on a "self-guided" tour of the Internet. They are surfing websites, joining social networks, and helping to chart the course of the power of the ever evolving Internet. According the Pew Internet, 93% of youth ages 12-17 are using the Internet and 73% are spending time on social networks. For adults only 78% are using the Internet with 65% of them spending time on social networking sites (Pew Research Center, 2011). This gap in activity between youth and adults shows an opportunity for digitally engaged adults to help guide and mentor youth in these online environments versus only peer to peer. There is also an opportunity for youth development professionals to step forward and lead this effort by translating youth development practices to online delivery. As youth development professionals, we need to be the
leaders in positive youth development (PYD) online. A change in focus must be made to help youth have a positive impact on the online global community just as youth organizations do offline.

**What is Positive Youth Development?**
The longitudinal 4-H Study of Positive Youth Development (Lerner, 2008) by Tufts University is demonstrating that Positive Youth Development (PYD) is a valid, measurable construct that is composed of five key aspects: Competence, Confidence, Character, Caring and Connection. Further, when these five C’s are present, young people display a sixth “C”, which is Contribution (Lerner, 2008).

The environments in which youth live, learn, and play, each have resources to promote positive youth development and become the “social nutrients” young people need for healthy development. Online environments hold tremendous potential to impact PYD.

**Hypothesis:** The five key PYD aspects practiced in an online environment by youth and adults should also lead to Contribution.

1) **Competence**
"Positive view of one’s actions in domain specific areas including social, academic, cognitive, and vocational. Social competence pertains to interpersonal skills (e.g., conflict resolution). Cognitive competence pertains to cognitive abilities (e.g., decision making). School grades, attendance, and test scores are part of academic competence. Vocational competence involves work habits and career choice explorations“ (Lerner, 2008).

Providing a learning community in a positive online environment provides a sandbox for developing competence in community. There are several advantages to this of learning and mastery. Luísa Miranda, Carlos Morais, and Paulo Dias describe the environment in this way: "the independent nature provided by computer-supported technology favors student-centered teaching, thus enabling reflexive construction of knowledge based on the student’s skills and objectives. Creating a student-centered approach involves providing different students with different options" (Miranda, Morais, & Dias, 2008). An online environment is not limited by a specific time of the day and gives the student an expanded set of resources and available teachers. This gives the student learning that is not bound by the geographic boarders or local interest in the content. Greenhow also shows that digital learning has the potential to help youth attain valuable 21st century skills including competency in core subjects, decision-making, leadership, collaboration, responsibility, and an orientation towards lifelong learning (Greenhow, 2007).

4-H currently has a 100 year presence in delivering curriculum provided by America’s 106 land-grant universities. Topics abound in variance and include subjects like livestock production, science, technology, health, arts, shooting sports, nutrition, and many more. Locally 4-H members depend on 4-H advisers and 4-H professionals to have the answers beyond the project book. If each adviser and professional could focus on being an expert in one project area, and share that in an online classroom, the learning becomes deeper and more meaningful to the youth. If the curriculum moves from paper to an online environment, now we have the ability to keep the content current and engaging. It also allows the learner to customize the activities to their own objectives, thus encouraging a stronger attachment to the project.

2) **Confidence**
"An internal sense of overall positive self-worth and self-efficacy; one’s global self-regard, as opposed to, domain specific beliefs“ (Lerner, 2008).
As youth make the journey towards adulthood, they become more aware of who they are as individuals. They work hard at being responsible, being good, and doing the right thing, although this journey is filled with trials and risks. They form moral values, recognize cultural and individual differences. Teens are concerned with how he or she appears to others (Allen, & Marotz, 2000). In the offline world, youth are judged by their peer groups based on appearance first and then on their ability to contribute to a group. This can lead to a lack of confidence in a young person, even if surrounded by caring adults. Positive youth development organizations use competence in a skill or knowledge set to help foster confidence in youth.

Being in an online community allows youth to be valued outside their high school or local peer groups. Most teen aged youth are involved in online social networks because it levels the playing field. Here being judged only by what you reveal to others can increase self esteem. A perceived popularity can be achieved as youth find peers who have similar interests. There are more opportunities to find others with a niche interest in a global online community. Youth also find a voice to speak out and come together around an important issue whether locally or globally. While Facebook and MySpace offer these types of social tools, they also have the ability to crush confidence in youth because they have not been done in positive environments with appropriate mentorship. As youth development organizations, social networking should include intentional teen online mentors as part of the training we provide our youth.

3) Connections
"Positive bonds with people and institutions that are, reflected in bidirectional exchanges between the individual and peers, family, school, and community in, which both parties contribute to the relationship” (Lerner, 2008).

Connection to others is what draw youth into organized youth development environments and create a sense of belonging. It is a desire to join an organization that matches the values of the individual. The Internet is built upon connections. It is through this interconnected web of information and people across the world that makes it powerful and compelling. For instance, by combining six million youth in 4-H with the power of these online connections, the organization becomes more of a connected force.

An online connection to others can lead to collaboration and a cooperation of learning (Malheiro, Morgado, & Quintas-Mendes, 2008). By connecting the local youth organizations together through online tools, we could see larger impact through the power of combining resources. Examples of online activities that increase youth connections through collaboration could be social networking, crowd computing, knowledge management, content management, discussion boards, blogs, and wikis. Hardware can also help to create these connections. Cell phones have become mobile computers, and while not every youth or adult has Internet access, cell phones are ubiquitous. By harnessing these connections beyond just the local level, a youth organization would have the ability to connect across geographic, age and time barriers.

4) Character
"Increased self-control, cultural development, spirituality, morality and a decrease in unhealthy behaviors” (Lerner, 2008).

Character development helps youth to be able to assess and respond to ethical dimensions of a situation. This is something that is needed more than ever in today's society. Youth have to be selective of the peers and adults that they select as respected role models. It is through close
mentorship of peers and caring adults that youth are able to see the choices that lead to being a productive citizen. Tweens look up to teens, which in turn, look up to adults. Research shows that youth can have a positive impact on the knowledge, attitudes and behaviors of younger children as well as their same-age peers (Meyer, Nicholson, Danish, Fries & Polk, 2000). 4-H promotes empathy, respect for societal or cultural rules and standards, a sense of right or wrong, or a sense of moral or social justice (Harachi, Catalano, & Hawkins, 1998).

There is a gap in the research related to character development in an online environment. Other than promoting online safety, there is little evidence of character development online. Character development, should be something that is integrated with other activities. Youth involved in an online positive environment can encourage others to behave according to the new norm. This new norm is created by online mentors who create a community value system. It is believed that in a PYD online environment, 4-H values learned offline extrapolate to values and voices online. This can be viewed indirectly in the online groups that youth members are forming on their own in current social networks.

5) Caring
"Targets youths' ability to understand and identify with others“ (Lerner, 2008).

Positive youth organizations provide the opportunity for youth to develop caring relationships with peers that include friendship (Zeldin, & Krauss, 1995). It is usually a friendship that draws youth into an organization and multiple friendships that keep youth persisting every year. Successful youth organizations also have the ability to recruit caring adults within the community, who may or may not be professional youth workers (Irby, Ferber, & Pittman, 2001). These caring adults provide assurance that the caring environment persists and that all members of the group are respected. The organization encourages youth to understand their personal emotions and how they might affect the group (Pittman, & Cahill, 1992). It is this process that creates an open environment within the group in which each member feels safe.

In online environments, human beings tend to reveal more about themselves than they might in public. This digital world puts introverts and extroverts on the same level, where each person has the opportunity to share. The sharing is not bound by the time limits of a club meeting. It is this constant environment that can reinforce the caring environment in the online environment. By training both 4-H youth and caring adult mentors on a local level, a similar club environment can be reproduced with the same safety features as a face to face meeting. In a positive environment, where youth feel safe, they may share more with each other, which creates a deepening relationship with another individual. It is this environment that we are confident that we can provide that is not available in any other online social network currently. By valuing and supporting caring relationship, a safe, trusted environment is created.

6) Contribution
"Making a difference in the lives of others through service“ (Lerner, 2008).

Lerner indicates that behaviors indicative of the Five C's lead to contributing positively to self, family, community, and, ultimately, a civil society (Lerner, & Steinberg, 2004). Such contributions are envisioned to have both a action component and an ideological component (Dowling, 2004). Through the development of competence, confidence, character, connections, and a caring environment a youth possesses an identity that leads to contributions. Mastery of these skills create opportunities to use these skills as both participants and as leaders in valued home, school and community activities beyond 4-H. The 4-H Study confirms that 4-H programs foster PYD and
Contribution. In fact, over time, 4-H'ers are 2.5 times more likely to be in the highest levels of contribution and 1.7 times more likely to expect to go to college (Lerner, 2008).

Examples of contribution in an online environment include:

- By playing an online game, points are converted into free rice to developing countries. [http://www.freerice.com/](http://www.freerice.com/)
- A Facebook group was created by the Junior Fairboard in Allen County, Ohio to mobilize supporters to come together to save the Allen County 4-H program when funding by their local county commissioners was cut to zero. A total of $62,000 was pledged in less than 48 hours. [http://www.facebook.com/group.php?gid=52939711189](http://www.facebook.com/group.php?gid=52939711189)
- Youth and adults consoling each other after the sudden loss of a Junior Fair Board Advisor. Youth found out late at night and wanted to grieve together, so an online space was created. [http://www.facebook.com/groups/160399727378471/](http://www.facebook.com/groups/160399727378471/)
- Idea Lab lets teens use tech tools to create and share. [http://www.Freshbrain.org](http://www.Freshbrain.org)
- Maximize the benefits and minimize the harm of media on the health and development of children and families. [http://www.mediawise.org](http://www.mediawise.org)

**What is Positive Youth Development in an Online World?**

Fostering Positive Youth Development online is an emerging frontier in learning, and youth development. Imagine if we could build an online mentoring model around the young person in which there are: positive and sustained youth and adult interactions; vibrant opportunities to learn; and the capacity to participate and lead in valued, community-based activities. Ultimately, we seek to harness the power of online communities that foster PYD to produce citizens who are engaged, active, and globally connected.

"The challenge to those concerned about dwindling social capital is to embrace the technological and social changes that have brought so much good in recent years, while finding new ways to create social-capital-rich environments for young people in spite of, and ideally because of, these changes (Putnam, 2000)."

Currently content created online by youth is done without the guidance of an adult mentor. In fact, often it is the young person who is teaching the adults how to use the tool. Youth organizations can take the lead by creating safe online environments for youth and caring adults. The content that is created in an intentional positive youth development online environment should be:

- Co-designed by youth and adults
- Focused on mastering fundamental life skills using experiential learning
- Engaging youth in collaboration and mentoring across social and geographic boundaries
- Leading to real participation and leadership as citizens of the nation and the world

**Research-based, dynamic content for "hands-on, minds-on" learning.** Experiential learning is the hallmark of 4-H youth development. By harnessing the knowledge of youth professionals and volunteers, this presents opportunities for learning and mastering fundamental life skills online, where youth are under the guidance of a competent authority. Opportunities for
youth and adults to learn and create together are inherent in the design and its implementation of these learning online environments.

**Social learning networks with a purpose.** Using the industry concept of cloud computing and applying it to the youth development organizations ("crowd computing"), we harness the wisdom of all youth, adults and the professionals to apply their learning to complex solutions across the globe.

Some of the exciting innovations could include:

**Online Mentoring: Beyond Local Boundaries**

Through the use of new technologies it is possible to truly promote and engage in "mentoring without physical boundaries" and foster an environment where "those that have can share with those that need." Almost without exception, mentoring takes place in a physical world that greatly limits its potential to create lasting impacts. Consider that, for the most part, clusters of companies with technology and healthy living expertise exist in communities well-served by their local educational systems — at least in comparison with school systems located in rural and urban areas. Online PYD can break down those barriers and help build mentoring opportunities from the Silicon Valley to youth in the Tennessee hills or hard-pressed Michigan inner cities.

Adult volunteers and staff have the opportunity to engage in online mentoring by utilizing learning management system tools, video and audio conferencing, collaboration and measurement to mentor in real time. These mentoring tools could be used via computer or cell phone and already exist on the web and mobile apps. Conversely, the same tools can be used to engage youth in mentoring adults who are learning new technology.

Using new and current technology to facilitate youth-adult partnerships will also enable us to pursue our goal of youth participation in program governance. 4-H, Boy Scouts, Girl Scouts, FFA, and other youth organizations have already established themselves as a source of mentoring opportunities. As those relationships grow into youth-adult partnerships, collaborative technologies will allow the work of those partnerships to take place across geographic, schedule, or age-related boundaries. As the technological and business world grows, young people are the ones developing new tools and strategies. It’s only logical that they should be the ones to make us grow, too.

Tim Davies, a researcher in the United Kingdom, has linked PYD to social networking. His research involves trying to create specific applications for those who are under 19 to allow for safe and effective social networks. Rather than shutting down these powerful communication and collaboration tools, he suggests that we find a way to manage the risk (Davies, 2010). Most parents will send their children off to youth camps, without even thinking about the risks involved. The reason is that they know that they will be surrounded by caring adults. We have learned to manage the risks at camp to allow for the growth forming experience it provides. We must do the same thing online.

If we provide a secure environment where online mentorship is practiced, then we can duplicate cross-age teaching. The University of Arizona defines cross-age teaching as "engaging teens as teachers for pre-teens or younger children, typically in non formal educational settings. In many communities, cross-age teaching has been a useful strategy to influence and educate younger youth (Russell, Polen, & Tepper, 2002).” This is already taking place offline in the local club.
programming. When implemented online, you now have an exponential group of caring adults and teen online mentors insuring the community works.

**Serving Online—Hands and Minds to Larger Service**

An important aspect of identifying what is service online is communicating and gaining buy-in to the value of this service to a community, whether its local or serving the greater 4-H community by contributing on the website Engaging youth in post-service reflection and allowing it to be a service-learning opportunity is a significant need in the development of online service opportunities.

- Encourage tiered online mentoring systems:
  - Adults mentor teens
  - Teens mentor tweens

- Engage youth and adults in service projects that can be completed online
  - Knowledge-Sharing
  - Tool Development
  - Provide opportunities for online service at any location, any time, for anyone of any skill

Google and Amazon pioneered the concept of "cloud computing" where applications exist in cyberspace and are linked to the user through increasingly higher speed Internet connections. Fundamental to its function, cloud computing is based on thousands and thousands of individual computer processors sharing a computing assignment.

Still in its infancy as a concept, "Crowd Computing," sometimes referred to as "Crowd-Sourcing," (Russell, Polen, & Tepper, 2002) combines the distributed processing precepts of "Cloud Computing" with the hands-on impact of community organizing. "We all work together to solve our community's problems."

With Crowd Computing, the development of a breakthrough solution for a specific problem is distributed to dozens or hundreds of individuals connected through the Internet. In a viral manner, individuals interact with each other or in groups to brainstorm, research, propose solutions and identify likely outcomes. A fundamental principle is: "no one person has a monopoly on insight, but as a group, all solutions are within the collective vision." We propose taking Crowd Computing to a global level with millions of youth and adults involved in identifying major solutions and seeking a breakthrough solution set.

For example, online service project examples: developing a wiki of icebreakers, collaborating on ideas and planning an online leadership session for younger members. Through Crowd Computing, youth, adults with an idea, and experts from companies, and our educational system can interact and distribute the problem solving across political and geographic boundaries. The image of a girl or boy sitting under a tree using a cell phone to participate with youth and adults around the world to solve global problems with local impacts is powerful.

**Collaborative Personalized Learning**

Learning and socializing seem to be separated in current online environments. A youth who wants to socialize with friends might sign on to Facebook to see what her friends are doing. To research a project, a student would most likely jump on Google to start searching. How can we bring social
and learning environment are in one pedagogical place? Youth and adults can use the crowd-sourcing approach to solving problems, contributing to project content, and developing the latest online tools. What this may mean is that we bring learning to youth from within Facebook or YouTube. Some examples of this “accidental” learning might be:

- Local youth activities to could complement online learning environments.
- Online experience will be coupled with an in-person club experience to create blended learning. (Blended learning is the most effective delivery method according to research.)
- Educators will have the opportunity to create exciting learner-centered online experiences for their local youth that enhance their experiences using various collaborative social media technologies.
- Curriculum can be re-envisioned to allow youth and volunteers to engage in the development process with youth development staff through wikis and Google Docs.
- Curriculum will be more learner-centered and allow the learner to control and guide their own learning process. Adults will serve in coach roles instead of facilitators.
- It will become more possible than ever before to engage youth in youth-adult partnerships as the curriculum teams can work asynchronously, which work with youth's schedules, like leadership or counselor training.
- Expressions of a youth's accomplishments within their projects will extend beyond local exhibits and poster designs.
- Mobile-learning opportunities will be abundant. Youth will have the opportunity to explore small tidbits of learning through quick mobile-learning offerings that develop them into lifelong learners.

**The Challenge**

The Internet has gained a significant place in children's daily lives. Social network sites, online games, video-sharing sites, and gadgets such as iPads and mobile phones are now fixtures of youth culture. Today's youth may be coming of age and struggling for autonomy and identity as did their predecessors, but they are doing so amid new worlds for communication, friendship, play and self-expression.

Significant discussion has centered on the potential risks associated with youth and online environments. Yes, there are risks associated with this communication strategy, but we must not let potential risk alone determine if it is a viable option for our program for the future. We know that simply offering programs for youth, there is a degree of risk that we must accept and manage. In 4-H we have been successful in managing our higher risk programs, such as camping, equine projects, shooting sports, overnight trips, etc. If we simply listed the potential risks involved in a pro/con format, we would not conduct many of these programs as the risk would outweigh the positive impact. However, we have taken steps to appropriately analyze and manage the risks associated with each of them. We know that camping with youth is one of the biggest risks we have in 4-H youth development, yet we continue to camp because we feel that the benefits to youth are significant and we have managed the risks.

There is an opportunity for engaging today's youth through this new world of technologies and in the process, foster positive youth development. How might we use online and media technologies to not only promote, but transform, positive youth development?
The Opportunity

Today’s young people continue to care passionately about their communities, the people they connect with, and their world. They create and communicate online in such a way that others see the benefit from their contributions and say “yes.”

As youth driven programs, we must engage in new strategies and methods by which we communicate with members, volunteers, families, and the community at large. Social networks and online learning are a growing and popular venue for much of our target audience and we must learn how to leverage those networks to enhance our programmatic efforts. The result is not only youth reaching their fullest potential but the potential for creating a positive youth development online environment, led by our youth.

References


The Effects of Non-Academic Mentoring on School-Related Cognitions: A Pilot Study

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The Effects of Non-Academic Mentoring on School-Related Cognitions: A Pilot Study

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Abstract: Mentoring has been shown to positively influence various youth outcomes and developmental assets. The 4-H Mentoring: Youth and Families with Promise (4-H YFP) program is a multi-component program designed to enhance individual, familial, and social assets of at-risk youth. This pilot study examines the effects of participation in the 4-H YFP program on school-related cognitions. Data were collected on 20 mentored at-risk youth and 18 waiting list youth. RMANOVA analyses identified significant differences on one scale and expected trends on five additional scales. Ecological systems theory is used to inform the interpretation of results.

Introduction

Mentoring in community-based settings has emerged as a credible intervention for at-risk youth on a myriad of outcomes. Although similar to school-based mentoring, the focus of community-based mentoring is not primarily academic. Rather, the focus is on enhancing interpersonal skills and developmental assets (DuBois & Karcher, 2005; Rhodes, 2002). Research suggests that community-based mentoring can positively influence self-esteem, social skills (Karcher, 2005), perceived support (Richman, Rosenfeld, & Bowen, 1998), and connectedness to family (DuBois, Holloway, Valentine, & Cooper, 2002; Karcher, Davis, & Powell, 2002). Community-based mentoring may also influence school-related outcomes and additional research has been called for to evaluate the effects of community-based mentoring on academically at-risk students (see Larose & Tarabulsy, 2005). Relatively few studies have examined the connection between community-based mentoring and school-related outcomes using a control group (King, Vidourek, Davis, & McClellan, 2002) or using theory as a framework for understanding outcomes (Karcher,
2005; Rhodes, Grossman, & Resch, 2000). This study addresses both of these gaps in the literature.

Much of what is known about mentoring and school-related outcomes is the result of mentoring programs that contain an academic tutoring component. As a result, the unique influence of non-academic mentoring relationships on school-related outcomes may be confounded by the tutoring element. This study explores school-related cognitions of at-risk youth who participated in a community-based mentoring program without an academic component. The rationale for this exploration is grounded in ecological systems theory as well as the empirical literature, which suggests the multi-component nature (i.e., familial and social) of community-based mentoring programs can positively influence school-related cognitions such as academic self-esteem, attitudes towards school, and academic motivation (see Karcher et al, 2002; Reis & McCoach, 2000; Rhodes et al, 2000).

Multi-Component Community-based Mentoring Programs

Increasingly, youth-serving programs are adopting “multi-pronged strategies” in an effort to provide a more comprehensive approach to youth development (Kuperminc, et al., 2005, p. 314). When it comes to academically at-risk youth, this represents a “philosophical shift from efforts to reduce the incidence of single identified problems in development toward strategies aimed at increasing opportunities and supports that will leave young people fully prepared for the challenges they will face as adults” (Kuperminc, et al. 2005, p. 314). Multi-component programs that incorporate familial and social elements are theoretically consistent with Bronfenbrenner’s (1979) ecological systems theory, which accounts for the reciprocal nature of the environment in which youth develop, the contexts of development, and the relationships that aid development.

According to Bronfenbrenner’s (1979) Hypothesis 47: “The developmental potential of a setting is a function of the extent to which the roles, activities, and relations occurring in that setting serve, over a period of time, to set in motion and sustain patterns of motivation and activity in the developing person that then acquire a momentum of their own. As a result, when the person enters a new setting, the pattern is carried over and, in the absence of counterforces, becomes magnified in scope and intensity. Microsystems that exhibit these properties and effects are referred to as primary settings, and the persisting patterns of motivation and activity that they induce in the individual are called developmental trajectories” (p. 285, emphasis in original).

Multi-component programs reach across settings to tap into factors that may be directly or indirectly related to the targeted behavior or outcome (Kuperminc, et al., 2005). Although school based mentoring/tutoring is clearly a reasonable intervention for academically at-risk youth, from an ecological systems perspective, mentoring programs with social and familial components may also “set in motion” or “sustain” desired cognitions and/or trajectory.

Case Study: 4-H Mentoring: Youth and Families with Promise

The 4-H Mentoring: Youth and Families with Promise (4-H YFP) program is an example of a community-based mentoring program that incorporates multiple components to promote positive youth development (Higginbotham, Harris, Marshall, & Lee, 2007). The overarching objective of the 4-H YFP program is to strengthen developmental assets in at-risk youth ages 10-14 (Search Institute, 2004). Specifically, the program seeks to improve academic outcomes, interpersonal skills, and family bonds. YFP seeks to achieve these goals through one-on-one mentoring, 4-H participation, and a monthly Family Night Out (FNO) activities for youth participants and their
caregivers. One-on-one mentoring provides the youth with a positive role model and companion for positive activities. 4-H activities offer youth experiential learning opportunities to increase social connection and contribution, personal competence, and character (National 4-H Headquarters, n.d.). The FNO activities foster family cohesion, family communication, and parent-child connection through facilitated monthly activities (Koestler & Betz, 2000).

Bronfenbrenner’s (1979) ecological systems theory highlights the developmental advantage that results when multiple settings reinforce positive cognitions and behaviors. The 4-H YFP program taps into this developmental advantage through its multi-component design. The purpose of all programmatic activities is to provide youth with supportive opportunities to “set in motion and sustain patterns of motivation” (p. 285) for productive relationships and behaviors. One-on-one mentoring, 4-H participation, and Family Night Out activities, individually and collectively, serve to set at-risk youth on a developmental trajectory of success by fostering self-confidence, self-worth, interpersonal skills and responsibility.

Despite the program goal of increased academic achievement, there is not an academic tutoring component nor does the program intentionally foster positive school-related cognitions. Notwithstanding the absence of academic mentoring (4-H YFP mentors are not tutors), preliminary evidence indicates that 4-H YFP participants do significantly improve in academic achievement as measured by pre- and post-program surveys (Higginbotham et al., 2007). As a group, 4-H YFP participants have demonstrated statistically significant improvements in core academic subjects. In a recent study funded by the Department of Education, 52% of 4-H YFP youth improved in reading, 46% improved in writing, and 39% improved in math. Additional, during this same time-period the number of unexcused absences declined for 32% of participating youth (Higginbotham, 2006).

**Research Questions**

Although many youth in the 4-H YFP program show improvements in their academic performance and attendance, the reason for these improvements remains an empirical question. One possibility, based on Bronfenbrenner’s theory, is that the positive cognitions about self and life are cultivated and reinforced across 4-H YFP settings and “carried over” into the school settings (Bronfenbrenner, 1979, p. 285; Higginbotham et al., 2007). This pilot study sought to evaluate this possibility, that a community-based mentoring program—without a tutoring component—can improve school-related cognitions. Specifically, our interest was in cognitions that have been found to be predictive of academic achievement including; academic self perception; attitudes toward teachers, classes, and school; and commitment to learn (Broussard, Mosley-Howard, & Roychoudhury, 2006; Klebanov & Brooks-Gunn, 1992; Larose & Tarabulsy, 2005). It was hypothesized that 4-H YFP participants would show improvements, as compared to a control group, on all measures of school-related cognitions.

**Methods**

**Sample**

The 38 youth participants for the pilot study were referred by Juvenile Courts, community social service agencies, or parents in three adjacent urban counties of a Western state. The youth had shown problems in one or more of the following areas: poor academics, poor interpersonal relationships, discipline problems, or misuse of alcohol, tobacco, or drugs. Fifty-four percent were in the 5th or 6th grade, 24% were in 7th grade, and the remaining 14% were in 8th grade (three
participants did not indicate grade level or age). The majority of participants were White/Caucasian (55%) or Hispanic/Latino (19%). Other ethnicities included Black/African American (5%), Asian/Pacific Islander (3%), and other (11%) (four participants did not indicate ethnicity). Of the 38 youth, 20 were randomly assigned to the mentor group while the remainder was assigned to the waiting list group. A comparison between the mentor group and the waiting list group revealed no significant differences on demographic characteristics.

Twenty-seven parents participated in the study as well. Of these, 16 were parents of mentor group youth and 11 were parents of waiting list youth.

**Design**

This study was conducted by Bach Harrison, L.L.C. in collaboration with the sponsoring Land-grant University and the State 4-H office. Pre-test data were collected from youth and their parents via a standardized data collection process. To minimize potential data collection bias at pre-test, determination of a participants’ group status (mentor vs. waiting list) was determined after the pre-test data were collected. 4-H YFP site coordinators scheduled a home visit with prospective participants to collect pre-test data. During the visit, site coordinators explained the 4-H YFP program, why evaluation data was being collected, and the importance of the evaluation. Consent forms as well as a commitment to participate fully in the program were then signed by parent and youth prior to pre-test data collection. Posttest data were collected six to nine months after participants entered the program. Program entry was defined as the pre-test data collection date for waiting list participants and as the date of receiving a mentor for the mentor group participants. After the appropriate time elapsed, 4-H YFP Site Coordinators scheduled a second home visit to collect posttest data from parent and youth participants.

**Measures**

Participants and a parent/guardian completed a battery of instruments. Those that pertain to the current study include:

*The YFP School Survey.* This scale was made up of five subscales from the School Attitude Assessment Scale-Revised (SAAS-R) (McCoach, 2002). The SAAS-R is a 35-item questionnaire designed to identify youth who underachieve in school. Subscales in this measure include the Academic Self-Perception Scale (e.g., not smart enough; avoid academic challenges), the Attitudes Towards Teachers and Classes Scale (e.g., teacher personality; class organization), the Attitudes Towards School Scale (e.g., commitment to learning; school investment), the Goal Valuation Scale (e.g., assignment value), and the Motivation and Self-Regulation Scale (e.g., personal strategies to facilitate achievement). The SAAS-R has been validated with a sample of 1,738 6-12 grade youth from schools in multiple states and diverse ethnic and socioeconomic backgrounds (McCoach, 2002).

*Parent’s report of youth’s commitment to learning.* On this measure, parents report their perceptions of how much their youth enjoys school, values learning, and feels that reading, finishing schoolwork, and doing well in school are important. It also addresses the extent that parents feel the teachers care about their youth. The questions were developed by YFP staff. They were based on the Search Institute’s Developmental Assets Model and their indicators of academic achievement (Benson, 1997; Search Institute, 2004).
**Youth’s report of commitment to learning.** This scale addresses how much the youth enjoys school, values learning, and the extent to which the youth feels that reading, finishing schoolwork, and doing well in school are important. The questions were developed by YFP staff and parallel the parent’s assessment of their youth’s commitment to learning.

**Analysis**

Repeated measures analyses of variance (RMANOVA) were used to examine youth and parent data, comparing participating families to waiting-list participant families. The analyses assessed whether there were significant differences as a function of

a) time, or differences between pre-test and post-test scores;
b) group assignment, or differences between YFP participants and waiting list participants overall; and
c) the interaction between time and group.

These analyses provided an opportunity to explore if program participants improved to a greater degree than the comparison group and thereby ruling out maturation (or, the simple passage of time) as an alternative explanation for any improvements seen in the mentor group.

**Results**

Overall, the data produced only one statistically significant interaction. However, several interesting and positive patterns emerged in the data for other scales, assuming they were not the result of chance. Given the small sample sizes in the pilot study and the relatively short window of time between pre- and post-tests these patterns are still discussed because they may be of interest for future evaluation efforts.

**YFP School Survey**

The data associated with the YFP School Survey provided some support for the hypothesis that 4-H YFP participation influences school-related cognitions. Table 1 presents the pre- and post-test scale means for both the mentor and waiting list groups. On the YFP School Survey, participating youth showed significant improvements on the Motivation and Self-Regulation Scale, \( F(1, 33) = 5.888, p < .05 \), as compared to the waiting list group. Although not statistically significant, three of the four remaining scales revealed data patterns in the expected directions with participating youth improving and waiting-list youth declining on the Academic Self-Perception Scale, \( F(1, 32)=2.525, p = .122 \); the Attitude towards Teachers and Classes Scale, \( F(1, 32) = 1.688, p = .203 \); and the Attitude towards School Scale, \( F(1, 33) = 1.136, p=.294 \).
Table 1
Pre- and Posttest Means for YFP Participants vs. Waiting List Participants – YFP School, Youth, & Parent Survey Scales

<table>
<thead>
<tr>
<th>Scale Name</th>
<th>N</th>
<th>Pre-test</th>
<th>Posttest</th>
<th>F</th>
<th>p</th>
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<tr>
<td>Academic Self-Perception Scale – YFP</td>
<td>19</td>
<td>4.58</td>
<td>4.79</td>
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<td>.12†</td>
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<td>4.59</td>
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<td>Attitude toward Teachers and Classes Scale – YFP</td>
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<td>5.11</td>
<td>5.52</td>
<td>1.69</td>
<td>.20†</td>
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<tr>
<td><strong>Attitude toward Teachers and Classes Scale - WL</strong></td>
<td>15</td>
<td>4.87</td>
<td>4.63</td>
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<td></td>
</tr>
<tr>
<td>Attitude toward School Scale – YFP</td>
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<td>5.23</td>
<td>5.31</td>
<td>1.14</td>
<td>.29†</td>
</tr>
<tr>
<td><strong>Attitude toward School Scale – WL</strong></td>
<td>16</td>
<td>5.26</td>
<td>4.63</td>
<td></td>
<td></td>
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<td>Goal Valuation Scale – YFP</td>
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<td>6.05</td>
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<td><strong>Goal Valuation Scale - WL</strong></td>
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<td>6.11</td>
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<tr>
<td>Motivation and Self-Regulation Scale – YFP</td>
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<td>5.09</td>
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<td>YFP Parent-Commitment to Learning Scale – YFP</td>
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<tr>
<td>YFP Youth-Commitment to Learning Scale – YFP</td>
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<td>3.75</td>
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<td>.29†</td>
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<td><strong>YFP Youth-Commitment to Learning Scale - WL</strong></td>
<td>16</td>
<td>3.67</td>
<td>3.52</td>
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</tr>
</tbody>
</table>

* p < .05. A statistically significant interaction was revealed for this scale; 4-H YFP participation was associated with more positive outcomes on this scale.
† Although not statistically significant, potentially interesting data patterns are apparent for these scales. In all cases, the 4-H YFP group showed improvement relative to the waiting list group.

**YFP Parent & Youth Commitment to Learning Scales**

Parents and participants responded to questions about the youth’s commitment to learning. As displayed in Table 1, there are some potentially encouraging results on the Commitment to Learning Scale (Parent report), \( F(1, 24) = 1.840, p = .188 \), and the Commitment to Learning Scale (Youth report), \( F(1, 33) = 1.183, p = .285 \). In both cases, the 4-H YFP group showed improvements from pre- to post-test relative to the waiting list group.

**Discussion**

The purpose of this pilot study was to examine the effects of participation in the 4-H YFP mentoring program on various school-related cognitions. Data revealed significant results for the Motivation and Self-Regulation scale (youth report). In addition, positive trends were found for five other scales: Academic Self-Perception, Attitude Towards Teachers and Classes, Attitudes Towards School (youth report), and Commitment to Learning (youth and parent reports).

These findings provide some indication that multi-component mentoring programs, even those without a tutoring element, may be able to influence school-related cognitions. This possibility is consistent with existing theory and research, which has implicated (a) mentoring from caring non-parental adults and (b) positive activities outside of the home as effective interventions to promote developmental assets. For example, Bronfenbrenner’s (1979) hypotheses #46 states that the
“development of the child is enhanced through her increased involvement, from childhood on, in responsible, task-oriented activities outside the home that bring her into contact with adults other than her parents” (p. 282).

Through one-on-one mentoring with an adult mentor, the 4-H YFP program promotes self-confidence. Positive cognitions about oneself, coupled with social support, may then “promote academic resilience and positive educational outcomes for at-risk students” (Richman et al. 1998, p. 311). Similarly, involvement in 4-H, or similar youth groups, theoretically reinforces positive developmental trajectories (Bronfenbrenner, 1979). 4-H is designed to “foster innovation and shared learning” by providing opportunities for “youth and adults to learn, grow, and work together as catalysts for positive change” (National 4-H Council, 2005, emphasis added). From an ecological systems perspective, the patterns of motivation, working with adults, and learning carry over from the 4-H context to school settings. The same is possible when patterns of motivation, self-confidence, and a commitment to learning are encouraged and reinforced by caregivers, which occurs in the context of Family Night Out activities.

Taking advantage of the theorized developmental advantage of multi-component interventions, the 4-H YFP program spans across three primary settings (mentoring, 4-H clubs, and Family Night Out activities) to “set in motion and sustain patterns of motivation and activity in the developing person that then acquire a momentum of their own.” (Bronfenbrenner, 1979, p. 285, emphasis in original). Although each component may uniquely contribute to the explained variance in outcomes, ecological systems theory would stress that “development is enhanced as a direct function of the number of structurally different settings in which the developing person participates in a variety of joint activities and primary dyads with others, particularly when these others are more mature or experienced” (p. 212).

**Implications for School Personnel**

School personnel strive to facilitate the academic success of their students. In light of ecological systems theory and the pilot data presented here, teachers and administrators may want to consider partnerships with community mentoring programs, in addition to school tutoring and other programs. In this way, schools can offer struggling students additional help without increasing personnel or expending resources.

The success of these partnerships may not be immediately apparent. Consistent with this study’s findings, Broussard, Mosley-Howard, and Roychoudhury (2006) suspect that mentoring is likely to affect academic self-concept and motivation before it affects the more often measured academic outcomes like GPA, attendance, and disruptive behavior. They specifically found that mentored youth reported “enhanced academic motivation... [and] increased... achievement efforts” as well as “improved...attitudes toward school” (p. 124). Consequently, the success of school-community mentoring partnerships may need to be evaluated over time or by assessing cognitive variables as was modeled in this pilot study.

**Implications for Community Youth Mentoring Programs**

Community mentoring programs should consider initiating partnerships and recruiting participants through schools. Rather than waiting for referrals from parents, program staff can highlight to school personnel the benefits of community mentoring for at-risk youth. Academically at-risk students typically have low perceived school competence, a helpless motivation related to school, and poor coping skills (Larose & Tarabulsy, 2005). Mentoring activities can assist in these areas by
cultivating feelings of self-worth and success via 4-H projects and competitions as well as personal encouragement by mentors and other caring adults. Community mentoring programs can provide a supportive after-school setting in which “patterns of motivation and activity” are fostered and reinforced (Bronfenbrenner, 1979; p. 285).

**Implications for Parents**

Parents struggling to find helpful solutions for academically at-risk youth should consider enrolling their youth in some sort of combination of interventions. Theory and research supports a multifaceted approach to addressing academic deficits and has consistently shown to improve school-related outcomes (see Broussard et al., 2006; Richman et al., 1998). This pilot study adds to that literature by specifically highlighting the potential of one multi-component program to positively influence academic cognitions. Parents should also be aware that parental involvement in these types of programs makes the intervention more effective (see DuBois et al., 2002; Higginbotham, MacArthur, & Dart, 2010).

**Limitations**

As with many pilot studies, the sample size of this study is a clear limitation. With only 20 mentored youth and 18 waiting list youth, it was not possible to control for confounding variables. Additionally, despite uniform program standards, the youth in this pilot study did not all have the same level of participation in each programmatic component (i.e., mentoring group youth did not receive an equal amount of one-on-one mentoring and 4-H club participation varied). As a result, the lack of significance on most subscales may be due to varying participation levels in the intervention group. Further study is needed to examine participation levels and associated outcomes. This may explain why there are many positive trends in the mentoring group but minimal significant findings.

Another limitation may be the duration of time between pre- and post-testing. The post-test occurred six to nine months after program entry. Optimally, mentoring relationships should last at least one year as positive outcomes from one-on-one mentoring are difficult to detect until that time (Grossman & Rhodes, 2002).

**Conclusion**

The potential of multi-component programs to foster positive youth outcomes is supported in both empirical and theoretical literatures. In light of the pilot nature of this study, the positive findings presented above should be cautiously interpreted as additional evidence that multi-component, community-based programs influence school-related cognitions. However, notwithstanding the small sample size and duration of the study, the fact that there was one significant result and several variables with trends in hypothesized directions, suggests additional research is warranted. Specifically, research is needed to assess the mechanism and degree to which non-academic mentoring programs “set in motion and sustain patterns of motivation and activity in the developing person that then acquire a momentum of their own” (Bronfenbrenner, 1979, p. 285), and in the case of academically at-risk kids, how that momentum carries over into the school context.
References


Parental Discussion about Personal Finances: Does it Make a Difference in the Amount of Debt Incurred?

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Parental Discussion about Personal Finances: Does it Make a Difference in the Amount of Debt Incurred?

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Abstract: Higher education costs have increased substantially over the past two decades and, therefore, student loan debt has increased as well. Studies have shown that one earns more money over one’s lifetime if he/she has a four-year college degree. In fact, it is often substantially more depending upon one’s profession. However, for some individuals, the costs of funding higher education may be confusing and often times overwhelming. A study was completed at a university in the Pacific Northwest (n=778) which asked college students about their financial behaviors, credit card debt, student loan debt, discussions with parents, and in what topics or workshops they would like more information. Based on this data, faculty and graduate students from the School of Family and Consumer Sciences and staff from the student financial aid office are creating workshops and curriculum to assist students in managing their debt and finances.

The Situation: Preparing for Higher Education

The current recession which began in December 2007 is impacting everyone, but it is especially challenging for young adults entering higher education. We know that education and income are closely related and therefore many young people have high aspirations for educational attainment (Shaklee, 2000). Future earning power may lead students to think a college degree is worth the debt incurred. According to a March 2007 report from the U.S. Census Bureau, adults with a bachelor’s degree earned an average of $54,689 in 2005, while high school graduates earned an average of $29,448. A bachelor’s degree may be worth more than $25,000 in increased annual income, but students must carefully choose their field of study and be realistic with how much they may earn.
However, the rising costs of higher education may make a college degree prohibitive for many students. In 1981, students working full-time in the summer months could earn about two-thirds of the full-time college costs for one year at a public institution. Twenty years later, students earning minimum wage would need to work full-time year-round to fund one year of education at a public school (Boushey, 2005). Therefore, many students are taking out sizeable government and private loans to pay their higher education.

The statistics confirm that student loan debt is continually increasing, and few students can afford college without multiple sources of financial aid. Two-thirds (65.56%) of four-year undergraduate students graduating with a Bachelor’s degree had education debt in 2007-2008, with an average debt of $23,186 -- an increase of 5.6% or $1,139 a year a since 2003-2004 (Kantorwitz, 2009). One quarter of undergraduate students borrow $24,936 or more and one tenth borrow $35,213 or more. College seniors who graduated in 2010 owed an average of $25,250 in student loan debt, up 5% from 2009 (Project on Student Debt, 2010). At a public university in the northwestern part of the United States, the 2007-2008 average student loan debt survey shows: $21,207 for undergraduates, $39,937 for graduate students and $55,619 for law students (Student Financial Aid Report, 2009).

With the current recession, under employment and/or unemployment, there is also heightening concern about the increased student loan default rates. The following student loan national two-year cohort default rates are as follows: 2003 - 4.5%, 2004 – 5.1%, 2005 – 4.6%, 2006 – 5.2%, 2007 – 6.7%, 2008 – 7.0%, 2009 – 8.8% to 9.1% for the 2010 two-year cohort (U.S. Department of Education, 2012). Student loans are generally considered “good debt” because it is an investment in oneself so that he/she has greater earning potential throughout one’s lifetime. However, it is imperative that students understand the responsibility of paying back student loans, the different payment options available, and how this will affect one’s budget during the payback process.

### Basic Financial Education and Debt

The recession indicated that many Americans may be living beyond their means and do not have a firm grasp of basic financial concepts. Studies have shown that four in ten Americans are misusing and misunderstanding credit, and high school seniors on average answered less than fifty percent of financial competency questions correctly. (JumpStart Coalition, 2008). When examining credit card debt, 84% of undergraduate students had at least one credit card, and 40% of the graduating seniors carried a balance that averaged $4100 (Sallie Mae, 2009). It appears that many youth as well as college students did not receive the adequate financial training necessary to make sound choices on how to spend, save and/or budget.

### Opportunities for Financial Education in High School

Multiple public schools have responded to this lack of training and developed financial curriculums to be used with high school-aged students. Thirty-six states have implemented some type of personal finance training into their high school curriculums; however, only fourteen states require students to take a personal finance course as a high school graduation requirement. (Council for Economic Education, 2012). In addition to the response by organizations and public education, perhaps studies should examine the financial training and modeling (or lack of) occurring in the home between parent (or guardian) and the child.
Parent-Child Financial Education

Many researchers agree that financial education needs to begin at an early age and that educating children on personal finance management at a young age will have positive, lasting effects on the rest of their lives (Lai, 2010; Livingstone, & Lunt, 1992; Staten, 1993; Sumarwan, & Hira, 1993). A study done by Pinto, Parente, and Palmer (2001) showed that lack of parental involvement in a child’s finances can have serious implications on the amount of debt they will ultimately obtain. These researchers examined the relationship between parental involvement in credit card acquisition and the amount of credit card debt that college students accrue. They concluded that college students whose parents were involved in the acquisition of their credit cards have lower overall credit card debt than students who had no parental involvement at all. A similar study conducted by Goldberg (2005) examined variables that affected debt accumulation and concluded that while 70 percent of parents in his study had taught their teens how to do laundry, only 34 percent of them had taught their children how to balance a checkbook. And, only 34 percent of them had taught their children how credit card fees and interest work.

The Study

To address the issues of increasing student loan debt loads and default rates, while trying to understand how young adults are learning about personal finance, an interdisciplinary team was created between faculty and graduate student researchers at a university in the Pacific Northwest and the university’s student financial aid office. A mixed method research study was completed in 2010 which examined students’ financial habits as well as their requests for additional training in financial topics.

A brief online survey was developed to capture undergraduate students’ financial habits and needs for additional training workshops. Questions examined credit card debt, student loan debt, saving, budgeting, needs vs. wants, sources used to attend higher education, and financial issues or topics in which they would like more information. The university’s institutional review board approved the survey. The university’s registrar’s office released 2000 randomly selected e-mail addresses. The response rate was 39% (n= 778). Students were sent the survey by e-mail using QuestionPro in early 2010. The subject line of the e-mail read “Chance to win $50.” Three reminder messages were sent weekly to the non-respondents in early 2010. The incentive to respond was having a chance to win one of four $50 gift cards. Four e-mail addresses were drawn with winners notified by email. Data collected from these surveys will help paint a picture of students’ current financial situation. It will also be used in the design of future workshops to insure that students’ financial issues and topics are addressed.

Results of the Study

Analysis using cross-tabulation indicated that 46% of 5th year seniors, who have student loans, have $20,001 or more in student loan debt with approximately 18% having more than $40,001 (see table 1).
Table 1
Reported Student Loan Debt by College Standing, n=778

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<th>&lt; $5000</th>
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<th>$10001-20000</th>
<th>$20001-40000</th>
<th>More than $40001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>45.60%</td>
<td>26.92%</td>
<td>20.88%</td>
<td>4.40%</td>
<td>1.10%</td>
<td>1.10%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>40.70%</td>
<td>15.70%</td>
<td>25.58%</td>
<td>12.21%</td>
<td>5.23%</td>
<td>0.58%</td>
</tr>
<tr>
<td>Junior</td>
<td>33.33%</td>
<td>14.12%</td>
<td>25.42%</td>
<td>16.95%</td>
<td>8.47%</td>
<td>1.69%</td>
</tr>
<tr>
<td>Senior</td>
<td>33.52%</td>
<td>6.25%</td>
<td>18.75%</td>
<td>21.02%</td>
<td>17.05%</td>
<td>3.41%</td>
</tr>
<tr>
<td>5th Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>14.71%</td>
<td>3.92%</td>
<td>6.86%</td>
<td>28.43%</td>
<td>28.43%</td>
<td>17.65%</td>
</tr>
</tbody>
</table>

Fischer’s Exact Test p<0.0001

When students were asked to describe their financial situation, 51% described their financial situation as shaky or disastrous while 49% described their situation as secure or comfortable (see Table 2).

Table 2
How Would You Describe Your Current Financial Situation?

<table>
<thead>
<tr>
<th></th>
<th>Secure</th>
<th>Comfortable</th>
<th>Shaky</th>
<th>Disastrous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8%</td>
<td>41%</td>
<td>42%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Other questions examined level of credit card debt, understanding needs vs. wants, budgeting, saving, sources used to fund higher education, and if they discussed financial issues with their parents. When looking at college standing and credit card debt, this study showed that of those students who had credit card debt, 77% had over $1000 (see Table 3).

Table 3
College standing by credit card debt

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>&lt; $500</th>
<th>$501-1000</th>
<th>$1001-2500</th>
<th>$2501-5000</th>
<th>$5001-7500</th>
<th>$7500-10000</th>
<th>More than $10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>86.81%</td>
<td>9.34%</td>
<td>1.10%</td>
<td>1.10%</td>
<td>1.65%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>74.57%</td>
<td>12.14%</td>
<td>3.47%</td>
<td>4.05%</td>
<td>4.62%</td>
<td>0.58%</td>
<td>0.00%</td>
<td>0.58%</td>
</tr>
<tr>
<td>Junior</td>
<td>58.66%</td>
<td>13.97%</td>
<td>10.06%</td>
<td>7.82%</td>
<td>4.47%</td>
<td>2.79%</td>
<td>1.12%</td>
<td>1.12%</td>
</tr>
<tr>
<td>Senior</td>
<td>59.22%</td>
<td>12.29%</td>
<td>6.15%</td>
<td>12.29%</td>
<td>6.15%</td>
<td>1.12%</td>
<td>2.23%</td>
<td>0.59%</td>
</tr>
<tr>
<td>5th Year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>50.96%</td>
<td>11.54%</td>
<td>12.50%</td>
<td>8.65%</td>
<td>8.65%</td>
<td>2.88%</td>
<td>1.92%</td>
<td>2.88%</td>
</tr>
</tbody>
</table>

Fischer’s Exact Test p<0.0001

When students were asked if they discussed credit card debt with their parents, Table 4 shows the results by how much credit card debt the student had. Twenty one percent of the students who did not discuss credit card debt with their parents had over $1000 in debt. Of those students who discussed credit card debt with their parents, 13% had over $1000 in debt.
Table 4
Discussion with parents and credit card debt

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>&lt; $500</th>
<th>$501-1000</th>
<th>$1001-2500</th>
<th>$2501-5000</th>
<th>$5001-7500</th>
<th>$7501-10000</th>
<th>More than $10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>58.58%</td>
<td>11.24%</td>
<td>9.47%</td>
<td>0.65%</td>
<td>8.88%</td>
<td>0.59%</td>
<td>0.00%</td>
<td>0.59%</td>
</tr>
<tr>
<td>Yes</td>
<td>69.69%</td>
<td>11.88%</td>
<td>5.31%</td>
<td>5.63%</td>
<td>3.75%</td>
<td>1.56%</td>
<td>1.24%</td>
<td>0.94%</td>
</tr>
</tbody>
</table>

Chi-square=21.7983, p=0.0028

Students were also asked if they discussed student loan debt with their parents. The data presented in Table 5 below showed that 20% of those with loans over $20,001 did not discuss it with their parents.

Table 5
Discussion with parents and student loan debt

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>&lt; $5000</th>
<th>$5001-10000</th>
<th>$10001-20000</th>
<th>$20001-40000</th>
<th>More than $40000</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>26.51%</td>
<td>13.86%</td>
<td>25.30%</td>
<td>13.86%</td>
<td>14.46%</td>
<td>6.02%</td>
</tr>
<tr>
<td>Yes</td>
<td>37.42%</td>
<td>14.31%</td>
<td>19.50%</td>
<td>16.04%</td>
<td>9.59%</td>
<td>3.14%</td>
</tr>
</tbody>
</table>

Chi-square=12.8841, p=0.0245

Students were also asked if they discussed needs vs. wants with their parents but when compared to student loan or credit card debt, the data was not significant.

A qualitative question asked students to list what financial workshops or trainings would be most beneficial to them. Data were collected and grouped into the following themes. Table 6 presents the results.

Table 6
Most Common Themes Requested for Financial Workshops

<table>
<thead>
<tr>
<th>Theme</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frugal Living</td>
<td>21%</td>
</tr>
<tr>
<td>Budgeting</td>
<td>17%</td>
</tr>
<tr>
<td>School Costs</td>
<td>15%</td>
</tr>
<tr>
<td>Saving</td>
<td>13%</td>
</tr>
<tr>
<td>Student Loans</td>
<td>10%</td>
</tr>
<tr>
<td>Scholarships</td>
<td>8%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>7%</td>
</tr>
<tr>
<td>Debt</td>
<td>5%</td>
</tr>
<tr>
<td>Making Money</td>
<td>4%</td>
</tr>
</tbody>
</table>

The Response

This study has shown that when students discuss student loans and/or credit cards with their parents, they have less debt. The importance of open communication about finances between parents and their children cannot be stressed enough. Using teaching opportunities before
students leave for college may help students understand the responsibilities of living on their own, using credit responsibly, and paying back their loans.

Educational programs are currently being developed in a variety of delivery formats. The goals are to have students think long term and understand the time value of money, reduce credit card debt and perhaps student loan debt, examine the actual costs of four-five years of higher education, learn how to budget their money, investigate all possible income sources to help finance their education, and find ways to live and play frugally.

One pre-financial aid workshop currently under development is: Your Financial Aid Cache. It is being developed by Family and Consumer Sciences graduate students who have taken personal finance courses, financial aid counselors and directors, with oversight from the family economics faculty. In this workshop, students will examine all possible income and resources available as well as examine ways to trim expenses. The intent is to have students focus on “pinching pennies,” living frugally, and borrowing as little as possible. The program will be presented as a workshop to incoming students when they visit campus, as well as be available on-line and in hard copy formats to all students.

The curriculum currently being developed begins by looking at a realistic “big picture” of how much everything is projected to cost for the particular degree, e.g. undergraduate, graduate, and law. In addition to the broad expense categories of tuition/fees, books/supplies, room/board, and personal, students will need to be more specific by listing all possible expenses and breaking down the personal category.

Students will create a detailed monthly spending plan and include all of the above plus: housing costs such as rent on or off campus, utilities such as electricity and gas, water/sewer/trash, renters insurance, medical/dental/vision insurance, entertainment, cell phone/landline, cable TV, computer/internet expenses, loan payments such as a car payment, credit card payments, furniture/appliance payments, car insurance and registration, car maintenance, public transportation, food at home/food away from home, beverages, clothing, laundry, personal care items, banking fees, federal and state income taxes, recreation/sports/crafts/hobbies, vacations, household supplies, gifts, contributions, child care, life insurance, savings and/or retirement savings, investment, and misc.

In the next step students will consider all possible income sources and available resources. For income, students will list: money saved for college, help from parents/other relative, scholarships, grants, work-study, paid internship, income from part-time work, income from summer work, gift money, income tax refund, other source of income, and student loans (government subsidized and unsubsidized, and perhaps private loans). Student loans will be discussed thoroughly so they and their repayment options are understood by students. Available resources include utilizing things that are free or very low cost such as: using public transportation, bicycling, walking, enjoying parks and other outdoor recreation opportunities, etc.

Living frugally and focusing on ways to trim expenses will be one of the main highlights of the program. Examining needs vs. wants and listing multiple ways to cut expenses will be presented and written down by the students. This extensive list will be broken down into the categories of housing, telecommunications, transportation, food, shopping, entertainment, recreation, banking and credit, medical/dental expenses, insurance, childcare, and taxes. Students will also be asked to share their own ideas to add to the list.
Other topics covered in the course will include basic financial education such as: understanding compounded interest and actual cost of loans, keeping a daily expense diary so you know where your money is going, reviewing expenses monthly, creating a filing system for recordkeeping, checking debit charges daily, balancing checking account weekly, eliminating overdraft fees, paying bills on time, eliminating late fees, using institution provided ATM machines, having an emergency savings, not carrying a balance on your credit card(s), and understanding the importance of saving early for retirement.

Another outcome from the collaborative effort between the family and consumer sciences department and the student financial aid office, and because of students’ requests is the offering of new courses in consumer studies/family resource management. Curriculum changes are underway and include offering new courses in financial counseling and debt management and financial housing to meet the Accredited Financial Counselor and Planning Educator (AFCPE) certifications. The series of courses are currently being considered as a certificate program open to all majors across the university, yet offered through the family and consumer sciences department.

It is important for students to understand that government provided student loans are to be used as a vehicle for attending higher education. An investment in one’s self to obtain higher paying jobs and increased earning potential over one’s lifetime is powerful. However, this power needs to be fully understood. Parents and schools must both teach their children financial literacy skills before they attend higher education, so students can be good stewards with their money, learn how to live within their means, and be financially responsible consumers.

References


Project on Student Debt. (2010). Student debt and the class of 2010. Oakland, CA.


Staten, M.E. (2002). The importance of financial literacy among college students. Hearing before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, testimony before the 107th Congress.


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“…and my World:”
Perceptions of County Educators and Volunteers toward International 4-H Programs

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“...and my World:”
Perceptions of County Educators and Volunteers toward International 4-H Programs

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Oklahoma State University

Abstract: The phrase “...and my world” was added to the 4-H pledge in 1973, forever solidifying 4-H’s commitment to international programming and global citizenship. In 2008, Oklahoma 4-H began to consider revitalizing its international outreach. After researching the barriers to International 4-H projects, Oklahoma 4-H educators and volunteers were surveyed to discover their interests in this area with the intent of beginning a renewed International 4-H program with educator and volunteer support. The survey results indicate that 4-H volunteers and youth educators prefer short term International educational programs that focus on cultural awareness and service-learning for older youth.

Introduction

The phrase “...and my world” was added to the 4-H pledge in 1973, forever solidifying 4-H’s commitment to international programming and global citizenship. This phrase, had already been added to the pledge on local and state levels, and was added officially as a result of a grassroots outcry from 4-H members across the nation (Wessel & Wessel, 1982). 4-H was working internationally long before 1973, with club work beginning in Great Britain in 1921 and followed by Denmark and Finland in 1924 and 1926. By 1925, Canada claimed 1,000 clubs with 100,000 boys and girls (Reck, 1951).

The growth of 4-H across the globe was impressive, but it didn’t affect the lives of many 4-H members in the United States. This was changed in 1948 with the beginning of the International Farm Youth Exchange (IFYE). The IFYE program sent delegates around the world to live with host families, work on their farms, and become immersed in their culture for up to six months. The IFYE program was reciprocal and brought youth from host countries to the United States for similar opportunities. IFYE was eventually changed to the International 4-H Youth Exchange (IFYE) in order to reach beyond its agricultural roots. Since that time, other international 4-H programs have come and gone with similar objectives. 4-H has trained Peace Corp volunteers, developed
rural youth clubs around the globe, and organized caravans of youth for short-term international experiences (Wessel & Wessel, 1982). In 1967 the Youth Development Project (YDP) combined elements of IFYE and the Peace Corps, and sent youth to Africa, Latin American, and the Philippines. Since its inception in 1972, the Japanese Exchange program has engaged 35 states to host over 30,000 Japanese teenagers and sent more than 6,000 American 4-H members to Japan (Radhakrishna & Ingram, 2005). 4-H even negotiated an exchange with the Soviet Union and sent members beyond the iron curtain in 1976 (Wessel & Wessel, 1982).

Through all this growth in international programming, 4-H has created global awareness during travel and exchanges. Conversely, international 4-H programs are often fragmented and isolated from mainstream 4-H (Etling, Reaman & Sawi, 1993). The barriers causing the isolation of International 4-H have been identified as expense, lack of a clearly defined project, agent resistance to international activities, problems with state program leadership, inadequate communication, deadlines, and limited opportunities for adults who might travel with youth to provide support (Boyd, et al., 2001; Etling, Reamann, & Sawi, 1993).

With the beginning of the 21st century, Oklahoma, like other state 4-H programs, dropped its international efforts due to a lack of interest from 4-H members, families, and personnel. In 2008, Oklahoma 4-H began to consider revitalizing its international outreach. After researching the barriers to International 4-H, Oklahoma 4-H educators and volunteers were surveyed to discover their interests in this area with the intent of beginning an International 4-H program with educator and volunteer support.

### Methodology

An Internet survey was developed to explore county educator and volunteer perceptions of starting an international 4-H program. The survey instrument was given face validity by review from a panel of experts. The survey instrument was created to determine the perceptions of the 4-H volunteers and educators. Quantitative and qualitative questions were asked concerning the interest in, and design of, an international 4-H program. An email was sent to all Oklahoma Cooperative Extension Service Educators (201) and all certified club leaders with an email address on record (107).

### Findings

The survey had a combined response rate of 40.93 percent, with a 65% response rate from the volunteers and 31% from County Educators (Table 1). Often 4-H volunteers and educators are also parents of 4-H members. This is evident in that 29.6% of the respondents identified themselves as 4-H parents. The survey respondents were 76% female, 54% county educators, 45% volunteers, and their years of service to 4-H ranged from less than 5 years to over 20 years (Table 2).

### Table 1

*Summary of survey response rate (N=115)*

<table>
<thead>
<tr>
<th>Audience</th>
<th># Emails Sent</th>
<th># Emails Undeliverable</th>
<th># Surveyed</th>
<th># Surveys Remitted</th>
<th>% Surveys Remitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educators</td>
<td>201</td>
<td>0</td>
<td>201</td>
<td>63</td>
<td>31.34</td>
</tr>
<tr>
<td>Volunteers</td>
<td>107</td>
<td>27</td>
<td>80</td>
<td>52</td>
<td>65.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>308</strong></td>
<td><strong>27</strong></td>
<td><strong>281</strong></td>
<td><strong>115</strong></td>
<td><strong>40.93</strong></td>
</tr>
</tbody>
</table>
Table 2
Summary of respondent demographics (N=115)

<table>
<thead>
<tr>
<th>4-H Affiliation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-H Volunteer</td>
<td>52</td>
<td>45.2</td>
</tr>
<tr>
<td>Extension Educator</td>
<td>63</td>
<td>54.8</td>
</tr>
<tr>
<td>Parent/Volunteer or Parent/Educator*</td>
<td>34</td>
<td>29.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27</td>
<td>23.5</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>76.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Service</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5</td>
<td>33</td>
<td>28.7</td>
</tr>
<tr>
<td>5-10</td>
<td>29</td>
<td>25.2</td>
</tr>
<tr>
<td>11-15</td>
<td>12</td>
<td>10.4</td>
</tr>
<tr>
<td>15-20</td>
<td>14</td>
<td>12.2</td>
</tr>
<tr>
<td>Over 20</td>
<td>27</td>
<td>23.5</td>
</tr>
</tbody>
</table>

*4-H volunteers and Extension Educators who are also 4-H parents. Duplicates from 4-H Volunteers and Extension Educators

**Interest in International 4-H**

The questions presented in Table 3 were answered with a one to five rating on a Likert-type scale with one being “Definitely No” and five being “Definitely Yes”. The data in the table are the mean ranking from the identified response group. Respondents indicated an interest in providing international experiences for youth through the Oklahoma 4-H program. Parent and volunteer responses averaged over 4.0 and educator responses were over 3.5 on all positive questions (Table 3).

Table 3
Respondent interest in international 4-H
Responses were on a scale from 1 to 5 where 1=definitely No and 5=definitely Yes (N=115)

<table>
<thead>
<tr>
<th>Respondent Interest</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined *</th>
<th>Standard Deviation Combined *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma 4-H should offer an international experience.</td>
<td>4.16</td>
<td>3.87</td>
<td>4.19</td>
<td>4.01</td>
<td>.871</td>
</tr>
<tr>
<td>International experiences are important part of youth development.</td>
<td>4.10</td>
<td>3.81</td>
<td>4.19</td>
<td>3.96</td>
<td>.990</td>
</tr>
<tr>
<td>Oklahoma 4-H should offer a international hosting program.</td>
<td>4.20</td>
<td>3.89</td>
<td>4.25</td>
<td>4.04</td>
<td>.865</td>
</tr>
<tr>
<td>Oklahoma 4-H should offer a international sending program.</td>
<td>4.12</td>
<td>3.69</td>
<td>4.13</td>
<td>3.88</td>
<td>1.00</td>
</tr>
<tr>
<td>Oklahoma 4-H should not offer international programs.</td>
<td>1.73</td>
<td>1.84</td>
<td>2.07</td>
<td>1.79</td>
<td>1.07</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.
Design of an International Experience

The questions presented in Table 4 sought to determine the respondents’ perceptions of a quality international experience. Questions were answered with a one to five rating on a Likert-type scale with one being “Not Important” and five being “Very Important.” The data in the table are the mean answer from the indicated response group. The most positive responses were toward creating a program with strong educational components based in study, cultural awareness and educational tours. Respondents also indicated a preference for youth to have a college credit option for participation and to include a service-learning component during the experience (Table 4).

Table 4
Respondent opinion of international 4-H program design
Responses were on a scale from 1 to 5 where 1=definitely No and 5=definitely Yes (N=115)

<table>
<thead>
<tr>
<th>Program Design</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined*</th>
<th>Standard Deviation Combined*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oklahoma 4-H Personnel/staff should attend with the youth</td>
<td>4.12</td>
<td>3.90</td>
<td>4.00</td>
<td>4.01</td>
<td>1.13</td>
</tr>
<tr>
<td>Youth should stay with international families when abroad</td>
<td>3.76</td>
<td>3.75</td>
<td>3.69</td>
<td>3.76</td>
<td>0.95</td>
</tr>
<tr>
<td>Youth should not stay with families when abroad</td>
<td>2.55</td>
<td>2.43</td>
<td>2.63</td>
<td>2.49</td>
<td>1.26</td>
</tr>
<tr>
<td>Youth should participate in Cultural Tours</td>
<td>4.45</td>
<td>4.60</td>
<td>4.69</td>
<td>4.55</td>
<td>0.61</td>
</tr>
<tr>
<td>Youth should study the country before traveling</td>
<td>4.64</td>
<td>4.56</td>
<td>4.81</td>
<td>4.60</td>
<td>0.63</td>
</tr>
<tr>
<td>Youth should participate in service learning while abroad</td>
<td>4.33</td>
<td>4.08</td>
<td>4.44</td>
<td>4.20</td>
<td>0.85</td>
</tr>
<tr>
<td>Youth should participate in educational tours while abroad</td>
<td>4.47</td>
<td>4.63</td>
<td>4.56</td>
<td>4.58</td>
<td>0.60</td>
</tr>
<tr>
<td>Youth should have the option to receive college credit for their experience</td>
<td>4.41</td>
<td>4.11</td>
<td>4.50</td>
<td>4.27</td>
<td>0.77</td>
</tr>
<tr>
<td>Youth should only travel to English speaking countries</td>
<td>2.78</td>
<td>2.37</td>
<td>3.00</td>
<td>2.60</td>
<td>1.19</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.

Participant Age
Respondents were allowed to select more than one age group in response to the question “What is an appropriate age for international 4-H program participants?” Responses were extremely consistent, as 103 of 115 respondents indicated ages 16-17 and 88 respondents indicated participants should be over age 18. A small percentage indicated any age under 16 years old (Table 5).
Table 5
Respondent opinion of appropriate age for international 4-H program participants
Respondents were asked to select all ages they believed to be appropriate (N=115)

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>9-12</td>
<td>3</td>
<td>3.06</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>13-15</td>
<td>8</td>
<td>8.06</td>
<td>9</td>
<td>7.96</td>
</tr>
<tr>
<td>16-17</td>
<td>46</td>
<td>46.94</td>
<td>57</td>
<td>50.44</td>
</tr>
<tr>
<td>Over 18</td>
<td>41</td>
<td>41.84</td>
<td>47</td>
<td>41.59</td>
</tr>
<tr>
<td>Total Responses</td>
<td>98</td>
<td>16.66</td>
<td>113</td>
<td>15.69</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.

Length of International Experience
Respondents were given the opportunity to identify how long they thought an international experience should last. Over 50% of the surveys indicated two weeks as a desired length of the experience. In general, parents and volunteers were more comfortable than educators with longer experiences (Table 6).

Table 6
Respondent opinion of appropriate duration of international 4-H programs (N=113)

<table>
<thead>
<tr>
<th>Length of Experience</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>2 weeks</td>
<td>22</td>
<td>43.14</td>
<td>35</td>
<td>56.45</td>
</tr>
<tr>
<td>6 weeks</td>
<td>16</td>
<td>31.37</td>
<td>12</td>
<td>19.36</td>
</tr>
<tr>
<td>1 semester</td>
<td>5</td>
<td>9.80</td>
<td>3</td>
<td>4.84</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>15.69</td>
<td>12</td>
<td>19.36</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.

Cost of International Experience
In response to the question “What is an appropriate fee range for an international experience?” $1,500 to $1,999 was the price range chosen most often. However, over 20% indicated costs up to $2,499 were appropriate (Table 7).

Table 7
Respondent opinion of appropriate cost of international 4-H program participants (N=106)

<table>
<thead>
<tr>
<th>Cost</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>$1,000 - $1,499</td>
<td>8</td>
<td>16.66</td>
<td>15</td>
<td>25.00</td>
</tr>
<tr>
<td>$1,500 - $1,999</td>
<td>14</td>
<td>29.17</td>
<td>23</td>
<td>38.33</td>
</tr>
<tr>
<td>$2,000 - $2,499</td>
<td>10</td>
<td>20.83</td>
<td>12</td>
<td>20.00</td>
</tr>
<tr>
<td>$2,500 - $3,000</td>
<td>11</td>
<td>22.92</td>
<td>7</td>
<td>11.67</td>
</tr>
<tr>
<td>Over $3,000</td>
<td>5</td>
<td>10.42</td>
<td>3</td>
<td>5.00</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.
Participation in International 4-H Experience
The last two questions on the survey asked respondents to rate their willingness to participate in an international project by travelling abroad or hosting a student on a Likert-type scale with one being “Definitely No” and five being “Definitely Yes.” On average, respondents were willing to send Oklahoma 4-H members abroad, but were less willing to host an international student in Oklahoma (Table 8).

Table 8
Respondent willingness to participate in international 4-H programs
Responses were on a scale from 1 to 5 where 1=definitely No and 5=definitely Yes (N=115)

<table>
<thead>
<tr>
<th>Willingness to Participate</th>
<th>Volunteer</th>
<th>Educator</th>
<th>Parent</th>
<th>Combined Response*</th>
<th>Standard Deviation Combined Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am willing to host an international student</td>
<td>2.67</td>
<td>3.05</td>
<td>3.25</td>
<td>2.89</td>
<td>1.41</td>
</tr>
<tr>
<td>I am willing to send 4-H youth internationally</td>
<td>3.43</td>
<td>3.60</td>
<td>3.63</td>
<td>3.66</td>
<td>1.18</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.

The final quantitative question on the survey instrument asked directly if the participants would like to see Oklahoma 4-H start an International 4-H program (Table 9). Choices were “Yes, Oklahoma 4-H should do this” or “No, I do not believe this is important for 4-H.” Ninety three percent responded “Yes, Oklahoma 4-H should do this.”

Table 9
Respondents interest toward starting an international 4-H program (N=106)

<table>
<thead>
<tr>
<th>Respondents Interest</th>
<th>Volunteer Response</th>
<th>Educator Response</th>
<th>Parent Response</th>
<th>Combined Response*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Yes, Oklahoma 4-H should do this</td>
<td>44</td>
<td>91.67</td>
<td>49</td>
<td>83.05</td>
</tr>
<tr>
<td>No, I do not believe this is important for 4-H</td>
<td>4</td>
<td>8.33</td>
<td>10</td>
<td>16.95</td>
</tr>
<tr>
<td>Total Responses</td>
<td>48</td>
<td>59</td>
<td>59</td>
<td>30</td>
</tr>
</tbody>
</table>

*Volunteer and Educator only. Responses of parents were not duplicated.

The survey instrument also included two open-ended questions to give the survey participants an opportunity to share more with the researchers. The responses are summarized in Tables 10 and 11. Representative quotes are also included.

Responses to the question “Why do you think youth should have an international experience?” were grouped into four themes; education and personal growth, cultural awareness, globalization, and experiences. The largest number of responses was categorized as cultural awareness; the other categories had approximately one-half the number of responses.

In closing the survey, respondents were given the opportunity to express any additional comments. Table 11 summarizes those remarks into positive and negative responses. The most frequent positive comments were general in nature; the most frequent negative comments were related to youth safety.
Table 10

*Responses to "Why do you think youth should have an international experience?"*

*Grouped by four themes: education and personal growth, cultural awareness, globalization, and experiences.*

<table>
<thead>
<tr>
<th>Education and Personal Growth (15 similar responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Learning opportunities that just aren't available in our country</td>
</tr>
<tr>
<td>• Give youth a more well-rounded education</td>
</tr>
<tr>
<td>• Allow youth to see the world from a new perspective</td>
</tr>
<tr>
<td>• Learning about other cultures is beneficial</td>
</tr>
<tr>
<td>• Chance to stretch our youth and help shape career choices</td>
</tr>
<tr>
<td>• Broden the scope of their experiences</td>
</tr>
<tr>
<td>• Give them a larger view of the world</td>
</tr>
</tbody>
</table>

Selected Representative Quote:
“This is a learning and growing experience that changes the youth in the way they look at other cultures. They change mentally as well as emotionally for the better. They look at the world in a different light.”

<table>
<thead>
<tr>
<th>Cultural Awareness (30 similar responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cultural learning experiences give the participants a sense of understanding for others and themselves</td>
</tr>
<tr>
<td>• Our youth need to be exposed to different cultures and ways of life. This promotes understanding and ultimately peace.</td>
</tr>
<tr>
<td>• Respect for others' traditions and culture is a very important aspect of maturity</td>
</tr>
<tr>
<td>• Helps us all dismiss common misconceptions about those from other countries</td>
</tr>
<tr>
<td>• 4-H members see the world through eyes other than their own</td>
</tr>
<tr>
<td>• Participants see the different life challenges &amp; cultures</td>
</tr>
<tr>
<td>• Promotes understanding of other cultures</td>
</tr>
<tr>
<td>• Volunteering is a worldwide opportunity</td>
</tr>
</tbody>
</table>

Selected Representative Quote:
“Students need to learn that there is more to life than their corner of the world. Reading about a country does not give the feel for that country. While abroad, you learn that there may be different customs, but they laugh, love, and hurt just like we do. It will give students a new prospective on how to deal with the world and their little corner.”

<table>
<thead>
<tr>
<th>Globalization (13 similar responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• We should teach our members more about the world because we live in a global world</td>
</tr>
<tr>
<td>• It is important for people of all ages to understand some of the benefits/barriers to other countries</td>
</tr>
<tr>
<td>• young adults need to see the global picture rather than just have a one sided viewpoint</td>
</tr>
<tr>
<td>• Youth need to understand we live in a global economy</td>
</tr>
<tr>
<td>• The world is bigger than just Oklahoma or the United States</td>
</tr>
</tbody>
</table>

Selected Representative Quote:
“Going abroad allows the youth to understand that this truly is a global society that we live in. It opens their eyes and minds to new experiences and cultures that will hopefully lead them to a more open minded tolerant view of the world and its people. It also shows them about the world outside of Oklahoma.”

<table>
<thead>
<tr>
<th>Experiences (14 similar responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Might be the only way some youth would have a chance to do something like this</td>
</tr>
<tr>
<td>• The benefits are phenomenal</td>
</tr>
<tr>
<td>• This will help better their life</td>
</tr>
</tbody>
</table>

Selected Representative Quote:
“An international education experience for 4-H members should allow students to experience life in other countries in order to better prepare them for success in a world that is "shrinking" due to advanced communication and travel capabilities. The experience should be uniquely 4-H. It should not merely duplicate exchange student programs that are already available through the department of education, schools, or other organizations.”
**Table 11**

*Positive and negative responses of respondents’ additional comments with representative quotes*

<table>
<thead>
<tr>
<th>Summary of Additional Comments (26 Responses)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Responses:</strong></td>
</tr>
<tr>
<td>• Great idea (4 Similar)</td>
</tr>
<tr>
<td>• Will help keep older youth involved</td>
</tr>
<tr>
<td>• Eye opening experience (2 Similar)</td>
</tr>
<tr>
<td>• Learn new ways of doing things</td>
</tr>
<tr>
<td>• Young adults should see the global picture</td>
</tr>
<tr>
<td>• Pre study should be required</td>
</tr>
<tr>
<td>• Post report should be expected</td>
</tr>
<tr>
<td>• Staying with families is important</td>
</tr>
<tr>
<td>• Would be interested in hosting</td>
</tr>
<tr>
<td>• Should have a well thought out plan for participating youth</td>
</tr>
<tr>
<td><strong>Selected Representative Quote:</strong></td>
</tr>
<tr>
<td>“I was privileged to get to travel in Europe when I was in my 20s and it was the most amazing, eye-opening, mind bending experience I’ve ever had.”</td>
</tr>
</tbody>
</table>

| **Negative Responses:**                       |
| • There are important issues and projects to be undertaken in the U.S. before we send 4-H members to other nations |
| • There needs to be a well thought out plan for what youth will do to qualify |
| • Safety and security issues would be of a concern (5 Similar) |
| • Only short term, past exchanges too long |
| • Not a major priority of Oklahoma 4-H |
| • The risks and costs make it unsuitable for 4-H |
| • I believe the same things can be achieved in the United States |
| **Selected Representative Quote:**            |
| “I would need to have more details about the format of the program before I can give any real opinions. At this point, I would tend to think that it will take a lot of time, effort and money to develop an international program that will probably benefit a small number of youth. Oklahoma 4-H may do better to invest that time, effort and money in a program that will benefit more of our youth.” |

**Summary and Conclusions**

These data indicate there is a positive perception among the 4-H volunteers and County Educators toward international programming through 4-H. The volunteers and parents generally gave a higher score to most questions than the County Educators; supporting previous research findings that indicate County Agents are resistant to international programs in 4-H (Etling, Reaman, & Sawai, 1993).

The population surveyed placed highest values on trip design. Particularly on elements that focused on cultural awareness by studying the country prior to the experience and by participating in cultural tours while abroad. They also suggested educational tours, participants receiving college credit for the experience, and conducting service learning projects as part of the experience. The appropriate fee range indicated was reasonable for designing an international experience.

Participant responses dropped somewhat when asked directly if they would host an international student or send a 4-H member abroad, indicating hesitance when confronted by being challenged to actually participate in the program.
Overall the survey results were positive toward beginning a new international program with the following recommendations:

- Experience should include learning about the culture
- Participants should study their destination country prior to travel
- Experience should be educational with tours and a service-learning component
- Participants should be at least 16 years old
- Experience should be limited to two weeks

The Oklahoma 4-H program has used the results of this survey in the design and development of a new short term international program that focuses on cultural awareness and service-learning for older youth. At the time of this article this new program was still in its pilot stages. 4-H volunteers and educators have similar perceptions and opinions as volunteers and staff in other youth serving organizations. The results of this research could be applied to any youth agencies or organization with the goal of extending their international outreach and educational efforts.

References


Promoting Healthy Development among Adolescent Girls: A Mixed-Methods Evaluation of the HERstory Program

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Promoting Healthy Development among Adolescent Girls: A Mixed-Methods Evaluation of the HERstory Program

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The Leadership Program

Abstract: The Leadership Program’s HERstory is a school-based, universal, preventative intervention designed to promote healthy youth development among adolescent girls by increasing their connections to pro-social peers and to school and community while developing social-emotional skills that serve as protective factors. In this school-year-long program, a facilitator implements three program phases: group development activities in Community Building, self-reflective Writing Workshop exercises, and a final Creative Output project, an ethnographic theater production or literary journal developed from participants’ Writing Workshop responses. The current mixed-methods study presents early evidence of program effectiveness based on focus groups and school record data review at two NYC public schools during the 2010-2011 school year. Participants reported improvements in key areas targeted by HERstory, including peer connectedness, academic achievement, and a range of protective factors including future orientation and goal setting. Results suggest this program approach may be suitable promoting healthy adolescent development for girls.

Introduction

In a society where women continue to lag on social and economic indicators (White House Council on Women and Girls, 2011), providing programs that target young women’s academic and social development is critical to promoting positive outcomes for girls. The HERstory program uses participants’ creativity in a research-based format to promote such development.

The Leadership Program’s HERstory is a school-based preventative intervention designed to promote healthy development for adolescent girls. Its primary foci are building connectedness among participants, and to their schools and communities, and teaching social-emotional skills that
serve as protective factors. This school-year-long program, developed in-house at The Leadership Program, and implemented by a mentor-style facilitator, is comprised of approximately 60 bi-weekly, two hour meeting sessions. Each session follows a set lesson structure that includes an aim, warm-up, main activity, and closing. Within each segment of the lesson structure, facilitators use the experiential learning cycle (Pfeiffer & Jones, 1975), a structured sequence of processing designed to accommodate multiple learning styles and social group differences.

The program begins with the Community Building phase, the first of three phases. The initial 12 sessions are group activities designed to promote strong peer networks, a protective factor for girls (Frey & Röthlisberger, 1999), that guards against academic failure and substance use (Morrison, Brown, D’Incau, et al., 2006; Willis, Resko, Ainette & Mendoza, 2004). Peer connections that develop in the safety of a single-sex space may lead to deeper bonds between individuals than those occurring in a co-ed environment (Maccoby, 1988).

In the second phase, youth participate in a 14 session Writing Workshop built around seven topical themes. Each thematic section includes an interactive group activity and a structured writing exercise. Creative and self-expressive writing is beneficial for young women as it facilitates the development of their identities, a protective factor (Eccles & Gootman, 2002; Gardiner, 1981). Ordered topically, sections begin with identity exploration (Who Am I?), then expand to include immediate circles of influence (Those You are Closest To) and developmentally relevant topics (Body Image, Love and Relationships). Girls then explore where they come from (Heritage), where they want to go (Dreams), and how they hope to be remembered (Legacy). The activities in the Writing Workshop phase are designed to support participants’ intellectual development by targeting critical thinking and reasoning skills and developing cultural competency and social awareness, which are associated with improvements in protective factors such as self-esteem, self-efficacy and identity development (Eccles & Gootman, 2002). Additionally, many Writing Workshop topics target specific protective factors, such as future orientation (Dreams and Legacy) and positive personal and ethnic identity (Who Am I? and Heritage).

The thematic content generated in the structured writing exercises forms the backbone of the final program phase, Creative Output. During the Creative Output phase, which varies in length from 5 to 20 sessions according to the resources of the facilitating organization, participants work with the facilitator to create their final artistic project, a literary journal or piece of ethnographic theater that allows them to express their thoughts about each theme to their communities.

The Creative Output section helps reinforce the peer connections established in the Community Building section, as group art projects promote teamwork and facilitate inter-group dialogue (Connors, 1998; Cooper & Sjostrom, 2006). Because HERstory is a school-based program, it also has the potential to improve school connectedness, which Centers for Disease Control (CDC) researchers have identified as the single strongest protective factor against violence, substance abuse, and school absenteeism (CDC, 2009; Resnick, Bearman, Blum et al, 1997; Resnick, Harris, & Blum, 1993). The Creative Output portion targets school connectedness explicitly by involving teachers, parents, community members, and other youth as audience members for the final theatrical performance, or as attendees at a “book party” unveiling the completed literary journal. Last, participation in the creative process is associated with improvements in protective factors including self-regulation, self-efficacy, and positive identity development (Baum, Owen & Oreck, 1997; Fredricks & Eccles, 2005; Hetland et al., 2007; Philips, Linington, & Penman, 1999).

The current mixed methods pilot study was conducted with HERstory participants during the 2010-2011 school year and assesses the relevance of the program theory to participants, as well as the
program’s effectiveness at promoting protective factors and academic achievement among participants.

**Methods**

Study participants were 22 middle (MS) and 25 high school (HS) students from two New York City public schools (one MS, one HS). All participants were regular HERstory attendees during the 2010-2011 school year. The mean age of MS participants was 12.2, HS = 15.4. Participants described themselves as Latina (100%). Both schools received Title 1 funding, indicating at least 40% of the student body received free/reduced lunch. Youth at both schools elected to participate in HERstory, however, the high school group began the year at greater risk for academic failure (their starting GPA was considerably lower), and reported histories of incarceration, institutionalization, and gang membership.

A combination of focus groups and school record data review were used to obtain a complete picture of program effectiveness. Seventeen MS and eight HS youth participated in half-hour focus groups designed to elicit information about improvements in protective factors targeted in the HERstory theoretical model, such as peer and school connectedness, academic performance, and future orientation and goal setting (see Appendix A). Approximately two hours of recorded focus group conversations were analyzed for theoretically relevant content, including any attitude and behavior changes participants attributed to HERstory.

To further examine the association of participation in HERstory with academic achievement, school record data for all participants were reviewed. We examined whether HERstory participants showed improvements in their English, math, and overall grades and school attendance throughout the school year, by comparing first to last quarter performance.

**Results**

**Focus groups**

Participants confirmed the relevancy of the program’s theoretical model. Across both age groups, youth reported overwhelmingly positive feelings towards the program. Three major themes arose in their answers: increased peer, adult, and school connectedness, increases in academic achievement, and increases in future orientation and goal setting behavior.

Participants reported a high level of connectedness to one another, as one participant reports, “we became a family.” When asked what facilitated this level of closeness, participants cited the Community Building group exercises and mutual self-disclosure, “When you get to know someone in HERstory you get to know who they are and how their life is and maybe you have something in common.” Youth also reported close ties to their facilitator, describing her as a “mentor,” “friend” and “role model.”

Participants credited their HERstory support network for changes in their academic performance. One participant reported that:

“I think that HERstory has made a difference because in the past when you’re with teachers you don’t want to ask questions because you are shy and embarrassed; but once you come to HERstory if anything bad happens you can always come here and talk about it.”
This confidence in the classroom was echoed by other participants who stated, “I used to stay in the back and listen to the teacher, but now I am participating more and I got better grades than last time.” Additionally, participants reported being more likely to come to school on days with HERstory meetings; one stated “there are days when I want to leave school but I stay all day for HERstory.” They also reported increased confidence with academic writing due to the required HERstory writing exercises.

Last, many participants reported specific goals for their futures and illustrated the ways in which HERstory facilitated goal creation and attainment. One participant said “HERstory makes me feel like if I want to be the first cop in my family I can do it.”

School record data
As mentioned above, MS participants tended to be more successful academically (mean overall GPA = 82%, English GPA = 85%, math GPA = 84%) at the beginning of the school year than HS participants (mean overall GPA = 71%, English GPA = 68%, math GPA = 60%).

Patterns of change also differed by age group, as MS youth showed improvements in overall GPA throughout the year (12 youth improved, three declined, seven remained constant; mean final overall GPA = 87%, English = 86%, math = 83%), while HS youth predominately improved their performance in English (10 improved, six declined, nine stayed the same; mean final overall GPA = 67%, English GPA = 70% math = 65

Discussion
Though preliminary in nature, results suggest academic and social-emotional benefits for HERstory participants. Qualitative findings suggest resonant lesson content and that the expected benefits in social-emotional skill building are leading to improvements in participants’ risk and protective factor profiles, such as stronger peer support networks, higher levels of school connectedness, improved self-concept and self-efficacy, and a stronger sense of future orientation. Both qualitative and quantitative findings tentatively suggest academic improvements, as expected from improvements in risk and protective factors. Our findings suggest the conceptualization of HERstory’s program theory is accurate, and that participation may be beneficial for urban adolescent girls. Future steps include a quasi-experimental quantitative evaluation of program effectiveness that will allow us to investigate causal linkages between program participation and academic performance.

References


Appendix A
Focus Group Questions

**Group dynamics**
1. **Buy-in:** Do you feel connected to HERstory outside of the designated meeting times? Why?
2. **Group cohesion:** Do you feel like your HERstory group bonded? What helped that to happen?
   a. PROMPT: Do you feel closer to the girls in this group now than before HERstory started?

**Protective factors**
3. **School connectedness:** Do you come to school for often on the days with HERstory or do you look forward to school more on those days?
4. **Self-concept:** Do you think of yourself differently since participating in HERstory? What about you has changed?
5. **Self-efficacy:** Do you feel like you are capable of doing more since being in HERstory? What can you do now that you couldn't do before?
6. **Future orientation/goal development:** How has HERstory helped you to think about your future and your goals? What goals do you have for yourself now that you didn’t before?
7. **Identification of support network:** Who do you go to if you have a problem? Are these people the same ones you would have gone to before the beginning of this school year?
8. (WHIP AROUND): How does it feel to perform your own words for an audience? Is it fun, scary, exciting? Why do you think it feels this way? Please tell me in one word and in one sentence say why you chose that word.

**Facilitator’s role**
9. What makes (facilitator’s name) a good facilitator?
10. How does she help you when you hit a roadblock? i.e., a problem with another participant or when you get stuck trying to answer a writing prompt.
11. Is there anything you wish she did differently?
The Value of Relevant, Project-Based Learning to Youth Development

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The Value of Relevant, Project-Based Learning to Youth Development

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Abstract: Project Based Learning models present authentic learning opportunities with real-life situations, enabling students to set their own learning goals and forge their own relationships (Barab, et al., 2001). The autonomy inherent in this model allows youth to bring their skills and experiences to real situations and to be seen as valued community members. This article describes a project-based learning model involving “externs,” who developed and implemented sustainability projects in their communities. Externs worked with Cooperative Extension professionals on locally relevant community projects during the summer of 2011 in three Arizona counties. The project-based learning experience had a positive impact on the lives of our three externs.

Introduction

Education theorists argue that the lecture format of pedagogy, that is, a didactic method focusing on memorization of facts, does not lend itself to retaining information beyond examinations as compared to participatory models, which are predominantly inquiry-based (Barab, Hay, Barnett, & Squire, 2001). Educators and educational institutions are moving towards more participatory, project-based learning models (PBL). PBL models are student-centered; use group-learning to solve problems (Raisch, Holdsworth, Mann, & Kabat, 1995); are process-based, working to solve issues that do not have simple answers (Hmelo-Siver, 2004); increase critical thinking, problem-solving, collaborative skills, content knowledge; and escalate motivation and engagement (Brush, & Saye, 2008). PBL models present authentic learning opportunities with real-life situations, enabling students to set their own learning goals and forge their own relationships (Barab, et al., 2001). The autonomy inherent in this model allows youth to bring their skills and experiences to real situations and to be seen as valued community members. This article describes a project-based learning model involving “externs,” who developed and implemented sustainability projects in their communities.
Background

First, it might be helpful to the reader to understand what we mean by “externship” as opposed to “internship.” The key distinction between a typical internship and the modified definition of externship is that students bring passion and particular skills and apply them in service to their communities through University of Arizona Cooperative Extension, as a part of the outreach mission of land grant universities.

The overall purpose of the Externships in Sustainability Program was to create opportunities for university students to bring their experience, skills, and enthusiasm to their communities through innovative sustainability projects. Externs applied their own knowledge, organizational and problem-solving skills to bring a local project to fruition. Externs worked with Cooperative Extension professionals on locally relevant community projects during the summer of 2011 in three Arizona counties. Data collection was conducted in the fall and winter 2011-2012. The projects are briefly described below followed by the results of a qualitative analysis of the data, specifically focusing on how the experiences of the externs and their supervisors aligned with the theoretical underpinnings of project-based learning models.

Graham County
The extern in Graham County investigated and documented findings on the current water and irrigation systems at the Discovery Park complex in Safford, a facility administered by Eastern Arizona College. The extern planned, coordinated, and installed a water-harvesting demonstration tank on one of the buildings, and developed a xeriscape plan for the three-building complex and amphitheater. As a result of this project the facility collects 4,000 gallons of rainwater annually which is used to water the outdoor gardens.

Cochise County
The extern in Cochise County coordinated and taught six classes at the Summer Gardening Institute for Teachers held in Sierra Vista. Workshops were conducted on Rainwater Harvesting, Gardening, Nutrition, Entrepreneurship, Creating Gardens at Your School, and Integrating Technology with School Gardens. Teachers participating in the summer institute went on to instruct approximately 500 youth annually using this locally relevant information.

Gila County
The Gila County extern developed and implemented a Farmers’ Market in Globe. The extern implemented market promotion activities including maintaining a Facebook page, writing a weekly newsletter, submitting articles to the local newspapers, and hanging posters. In addition to assisting vendors and the market manager with logistical matters, the extern also conducted children’s activities and arranged for weekly guest speakers. The extern was also responsible for developing, implementing, and analyzing a survey of market vendors to track sales and attendance.

Method

To better understand what impact the externship had on the students and participating supervisors, in-depth interviews were conducted with key informants. A set of interview questions and an interview protocol were developed. Three externs and their supervisors were interviewed six months after participating in the externship pilot project. Three members of the sustainability team, consisting of Cooperative Extension professionals, conducted the interviews, each interviewing one extern and their respective supervisor separately. Interviews were conducted by
phone at the participant’s convenience. Notes were taken during the interview and no recordings were made. Notes were then transcribed and distributed to a team of six sustainability team members who conducted a content analysis of the transcripts (Hsieh, & Shannon, 2005). The evaluation was submitted through the University of Arizona Institutional Review Board.

**Interview Questions**
A set of open-ended interview questions was developed by the members of the sustainability team who conducted the interviews. Some questions were asked of both supervisor and extern, and some were unique to one or the other as noted below:
- (J) – Joint question
- (PS) – Project Supervisor question
- (E) – Extern question

**Questions:**
1. Briefly describe the externship project you participated in. (J)
2. What worked well? Why do you think that it worked well? (J)
3. How did this position/person influence overall programming and impact in the county? (PS)
4. How did this opportunity change (or influence) what programming you are doing? (PS)
5. What does it mean to be working in your own community on a sustainability project? (E)
6. How did you incorporate sustainability/sustainable practices? (E)
7. How has this experience influenced school decisions/career path? (E)
8. How has this experience changed (or influenced) your definition of sustainability? (J)
9. What does this mean in your community and the broader university around the issue/topic of sustainability? (J)
10. What are the next steps? (J)

A protocol for analyzing the data was established based on the recommendations of Taylor-Powell, & Renner (2003): becoming familiar with the data; organizing responses by the interview questions; identifying categories by emerging themes (circling or highlighting key words or phrases) and refining those to sub-categories when appropriate; identifying commonalities among categories and sub-categories by making notes in margins or columns; and reaching consensus on the emerging themes and interpretation of the data through group discussion.

**Results**

Three primary themes emerged from the analysis of the data:
- Personal impact (e.g., independence and self-reliance of extern)
- Extension and Community impact (e.g., building ties to the community; building capacity; and further establishing Extension identity in communities)
- Sustainability impact (e.g., awareness of sustainability issues; and evidence of behavior change)

For the purposes of this article we will focus on the “personal impact” theme and the six sub-themes that emerged from the extern and faculty mentor interviews:
1. Self-reliance and Responsibility
2. Mutual Relationships
3. The Value of Hands-on Relevant Learning
4. External Recognition of Expertise
5. Change in Identity
6. Raising Awareness of Sustainability
The themes that emerged from this analysis align with project-based learning themes including self-reliance, responsibility, mutual relationships, multigenerational involvement, hands-on relevance, ownership, and real-world action. Below we illustrate these themes with the words of the externs.

1. **Self-reliance and Responsibility**

According to project-based learning approaches, projects are based on challenging questions or problems and give students the opportunity to work relatively autonomously over extended periods of time (Jones, Rasmussen, & Moffitt, 1997; Thomas, Mergendoller, & Michaelson, 1999). For the externs involved in this program, a key component of the experience had to do with the autonomy they were given and the responsibility that was entrusted to them. With strong mentorship available when needed, externs learned to organize themselves, manage their time, and move forward according to a plan. Flexibility and effective problem-solving, sometimes in the moment, were invaluable experiences for the externs. One extern commented, “This was the first job that I’d really had and it was cool to have assistant manager responsibility. It’s great to know that I could be a manager. I dealt with disgruntled customers too and learned this skill.”

2. **Mutual Relationships**

The mentor—extern relationship proved to be of great importance to the externs. Faculty members were able to strike that balance between guidance and fostering independence. They became facilitators of learning rather than the instructors. An extern said of working with her mentor, “She set me lose and I ended up doing more than I was told. I put my own ideas out there. I liked the learning technique.”

3. **The Value of Hands-on Relevant Learning**

Nationwide, the thrust in education is toward the use of real world relevancy to stimulate authentic learning that cuts across subject areas. Project-Based Learning pedagogy does this. According to the Buck Institute for Education, (2003), “evidence shows that PBL enhances the quality of learning and leads to higher level cognitive development through students’ engagement with complex novel problems” (p. 6). All externs expressed the personal value of their hands-on learning experience. One extern said, “I used what I learned in Extension and applied it to advertising in my own work.”

4. **External Recognition of Expertise**

All externs expressed their surprise and delight at the recognition that they received from adult mentors and community members. Self-recognition of expertise is also embodied in one extern’s statement, “I can’t express enough the experience that he gave me. I’ve always been managed and never had the opportunity to develop a whole program with all the pieces by myself.” The self-recognition of expertise enables youth to shift toward teaching, effective communication of that expertise, and ultimately leadership.

5. **Change in Identity**

Career-ready means more than having mastered content and practice. It also means that a person has interpersonal, communication, project, and time management skills to name a few. Employers are seeking multifaceted and multi-competent grads and emphasize the importance of making new discoveries and applying personal skills (McWilliam, Poronnik, & Taylor, 2008). As a result of the externship experience, one of the externs has taken on a new identity, explaining: “… now I am recognized as a student in the UA making a change. I am an educated person working in the community and now I’m recognized as an adult working for the community.”

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another extern the experience was life-changing, stating: “The Externship changed my view a lot—it got me interested and caused me to change my major. It opened my eyes and made me want to bring it (sustainability) back to my community.”

6. Raising Awareness of Sustainability
Externs were better able to talk about sustainability after their experience than they were prior to their externship. On the concept of sustainability two of the externs described it this way, “It’s more out of the box thinking style that people don’t always do” and “It’s the ability to self-sustain.” Even an Extension faculty’s viewpoint shifted during the implementation of the sustainability projects: “It (the project) really showed me that it’s all about community effort. There are farmer-buyer connections that are important. Everyone in the community has a role for sustainability to happen. It’s creating healthy community, not solely relying on outside folks.” According to Monroe, Andrews, & Biedenweg (2008), “When youth develop a community service project and participate in the selection and design of their activity, for example, they are likely to become more efficacious, empowered and committed as they improve their community” (p. 233).

Conclusions
Relevant, authentic projects offer invaluable learning experiences to today’s youth. That experience is enhanced when youth are entrusted with the development and implementation of the project from the beginning. As illustrated above, many of the themes that emerged from this analysis are tenets of project-based learning including self-reliance, responsibility, mutual relationships, multigenerational involvement, hands-on relevance, ownership and real-world action. The project based learning experience had a positive impact on the lives of our three externs. These projects also built in vital workplace skills and lifelong habits of learning and enabled externs to address community issues, explore careers, interact with adult mentors, use technology, and engage with community audiences.

Implications
The four essential elements of positive 4-H youth development (mastery, belonging, independence, and generosity) provide a theoretical framework for the project-based learning delivery methodology. The authors of this article recommend that this methodology be utilized more often by Extension professionals to engage youth in developing life skills such as problem-solving, critical thinking, and collaboration: skills needed to successfully transition to adulthood. We believe that adhering to the project-based learning pedagogy can lend structure to instruction and further optimize the benefits.

The strong theoretical framework in combination with the comprehensive methodology allow for wide duplication of the Externships in Sustainability Program to any university extension program across the country. The Program can also be readily adapted to other content areas and settings.

This program would benefit from research that fine-tunes various aspects of the model. One further assessment would be to document and assess the mentorship provided to ascertain the right balance between guidance and fostering independence. Guidelines for mentor intervention, based on concepts of youth adult partnerships, would help to establish when it is appropriate for adult supervisors to provide more direct instruction to facilitate the progression of project-based learning in a given time-frame. Additional research on the required skill set and maturity level for the externs to ensure project success would also strengthen this approach to youth programming.
References


Utilizing 4-H in Afterschool Settings: Two Approaches for Integration

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Utilizing 4-H in Afterschool Settings: Two Approaches for Integration

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Abstract: As our communities grow and change, afterschool programs represent an avenue to bring resources to populations which would otherwise not be available to them. Combining 4-H with the afterschool environment can be beneficial in supporting and raising the quality of afterschool programs being offered. This article explores the benefits and challenges of two approaches of implementing 4-H programming in afterschool settings: the 4-H managed program that is created and run solely by 4-H faculty and staff and the 4-H afterschool partnerships which are facilitated in partnership with existing afterschool programs. Regardless of the approach, combining 4-H with afterschool programs can strengthen well established programs and can enhance the quality of all afterschool programs.

Utilizing 4-H in Afterschool Settings: Two Approaches For Integration

The hours between school and when parents get home from work have been proven to be a critical time for youth and families (Afterschool Alliance, n.d.; Miller, 2003). While it is true that afterschool programs provide a safe haven for youth if their parents are unavailable (Afterschool Alliance, n.d.; Newman, Fox, Flynn, & Christeson, 2000), we also see an increasing need for supplemental education as the United States falls behind in different areas of education (Miller, 2003). As educators are continually stretched to capacity, the need arises for education to be rounded out through other avenues. Afterschool programs can effectively fill in the cracks that seem to get larger every year (Afterschool Alliance, n.d; Miller, 2003). As afterschool programs become increasingly important to the development of our youth, it is important to ensure these programs are structured and implemented in a high quality way.

4-H is an ideal partner for afterschool programs because of the high quality projects, goals, and ideologies of 4-H. The 4-H organization was established in 1902 and has years of longitudinal research to support the positive youth development benefits of 4-H programming (Lerner, Lerner
The mission of 4-H is to assist youth in acquiring knowledge, building character, and developing life skills in a fun learning environment that will enable them to become self-directing, productive members of society (National 4-H Council, n.d.). 4-H has a “learning by doing” ideology to “make the best better” (National 4-H Council, n.d.).

While youth can choose to participate in a vast array of project areas that fit their interests, the current mission mandates of 4-H include healthy living, science, and citizenship (National 4-H Headquarters, n.d.). These mission mandates align with the research and programming efforts of USDA, and the National Institute of Food and Agriculture. They are also aimed at helping prepare the next generation of scientists, engineers and technology experts who will keep the United States competitive with other countries around the world.

The 4-H program has its roots in an agriculture background that often appeals more to rural youth; however, 4-H has strong membership in both rural and urban environments because of the breadth of curriculum and utilization of more nontraditional formats that are effective in metropolitan areas such as afterschool programs (Cano & Bankston, 1993; Fehlis, 1992; Van Horn, Flanagan, & Thomson, 1999). Providing 4-H programming in nontraditional formats extends the program to more youth that may not otherwise be able to participate in 4-H programs, especially in urban areas (Fehlis, 1992; Halpurn, 2002).

Integrating 4-H into Afterschool Settings

Several afterschool programs in Utah have found great success in implementing 4-H programming into afterschool settings. The purpose of this article is to highlight the value of integrating 4-H programming into afterschool settings and provide an overview and suggestions of how this can be done.

Youth who attend afterschool programs generally meet at the school or another easily accessible location soon after school is over. Youth are then involved in programming, which usually includes homework tutoring, clubs, and group games that involve both fine and gross motor skills, and other enrichment activities until about 5:30 p.m. Because this common schedule is utilized by both afterschool programs with and without current 4-H involvement, integrating 4-H programs into an afterschool program is an easy addition to any program. The 4-H curriculum fits best into the club/enrichment time; however, other group times, such as announcements when the youth first arrive or snack time, is also a great timeframe for integrating elements of 4-H programming.

Furthermore, the 4-H model shares and supports the same youth development components that most afterschool programs strive to adopt, such as the 40 developmental assets model (Scales, Benson, Leffert, & Blyth, 2000), healthy living, and service. 4-H curriculum and resources can be a great asset to afterschool staff to enrich and expand their club offerings and encourage opportunities for youth to develop leadership skills.

In addition, many of the 4-H curricula support youth in learning preventative life skills such as: career exploration, healthy body/lifestyles, financial literacy, healthy interpersonal relationships, prevention of tobacco/drug/alcohol abuse, prevention of violence/gang affiliation, and pregnancy/sexually transmitted infection (STI) prevention, which are often required as national mandates for afterschool programs and grant monies (Department of Workforce Services, 2011).
Two Approaches for Integration

In Utah, there are two main ways that 4-H has been utilized in afterschool settings. The two approaches include a total 4-H managed program and a 4-H partnership. Each approach has benefits and challenges, which will be shared below.

4-H Managed Programs
A 4-H managed afterschool program is an afterschool program created and run solely by 4-H staff. This approach may be best utilized by those who want to start an afterschool program in an area where currently there are not afterschool programs serving a population. Funding for this program is generally acquired in coordination with the 4-H faculty in the county where the program will be held. In Utah, programs of this nature sustain themselves through grant monies often related to federal, state, private, or 4-H funds, both national and local, along with parent fees. Once funding is obtained, the 4-H faculty generally oversees staff training, budget management, and implementation of the afterschool programs.

Implementing the 4-H program in this way provides freedom to structure the program to highlight all important aspects of the 4-H program, such as leadership opportunities, creating a sense of belongingness, opportunities for service, and experiencing a solid club environment where youth complete projects based on 4-H curriculum in a hands-on learning environment. It also promotes 4-H attendance at other 4-H events such as summer camps, county and state fairs, and county and state contests where youth have an opportunity to showcase the skills they have learned in their 4-H activities. Because the program is implemented with money acquired by 4-H and is managed completely by 4-H trained staff, the youth involved have a solid connection to the 4-H program and its ideology. 4-H volunteers are also likely to be utilized along with paid staff to supplement enrichment activities. This connection directly to 4-H provides high quality programming and activities utilizing curriculum that has been peer reviewed and offered by a land grant university.

While this approach to 4-H afterschool management has many benefits, the total 4-H managed program requires much time and effort from 4-H county faculty to ensure the program will have the funding, training, and resources necessary to ensure a successful program. This may be a challenge in some areas since not every county has the staffing resources that can provide the amount of time necessary to create and sustain an afterschool program. Funding is often competitive and can be challenging to obtain.

In addition, because this approach is essentially starting a new afterschool program from scratch, there are many community partners and resources that need to be secured in order to ensure program success. Some of these include support from the local school district, school principals and staff, and partnership for space if it is shared either with a school or another entity.

4-H Afterschool Partnerships
Another approach of 4-H implementation in an afterschool setting is creating partnerships with the school district and any other entities already offering afterschool programs. In this approach the funding, implementation, and management of facilities and staff is provided by programs that are school-based, government/recreation based, community based, or private providers. These partnering agencies offer the staff training and resources to run the afterschool program on an everyday basis, and 4-H faculty and staff offer training and resources specifically to implement 4-H curriculum and programming into the afterschool setting.
For example, the 4-H faculty may provide training to afterschool staff throughout the year on some of the more complicated 4-H curriculum, such as robotics, rocketry, or cake decorating; and the afterschool staff then implement the curriculum for an agreed upon minimum level of time (i.e., one hour per week or one 4-H club per school block). Alternately, sites may also choose to implement this type of partnership through coordinating 4-H volunteers to go into the programs and teach the youth directly, with afterschool staff serving as a supportive role in the 4-H clubs.

In addition to training, local 4-H offices may also provide resources from a lending library, which includes curriculum and supplies for 4-H activities (e.g., rocket launchers, GPS units, kits, etc.). The afterschool staff can borrow and utilize kits from the lending library in order to facilitate 4-H clubs in the afterschool program. When resources contain consumable supplies, a small stipend fee may be charged in order to replenish the supplies.

Implementing 4-H programming into existing afterschool programs can be a benefit to afterschool staff, 4-H faculty and staff, and youth attending the programs. Afterschool staff can receive more curriculum and resources to provide better quality programming for their youth. In addition, 4-H faculty and staff can reach more youth within communities who may not otherwise be involved in 4-H programming. Most importantly, this partnership will provide youth with more opportunities at the school and in the community to develop leadership, skills in different project areas, and receive recognition for their efforts.

While 4-H partnerships are an effective way to enhance already existing afterschool programs, one of the challenges of implementing 4-H in this way is that each site chooses to implement their programs differently and do not always include all essential elements of 4-H, which ensures the effectiveness of the program. In addition, much of the success of this partnership rests in the afterschool staff's interest level and dedication of consistently implementing 4-H programming that is available to them. For example, afterschool staff may utilize 4-H curriculum without letting youth know they are connected in any way to 4-H. In this case, the youth would obviously be less likely to feel a sense of connection to 4-H or attend any 4-H activities outside of the school.

On the other hand, staff who fully implement the 4-H program can provide opportunities for youth to feel connected to the program not only at the school but within the county. Strong partnerships with the 4-H faculty and staff could allow for unique 4-H opportunities to be developed at the school according to the needs of the youth. Much of the limitation of this approach lies within the delicate balance of the partnership between the 4-H county office and the afterschool sites, and especially the willingness of the faculty and staff on both sides to implement the 4-H program in a way that will be most beneficial for the youth.

Successful Implementation

One of the challenges with all afterschool programs is the ability to measure the quality and success of the program. According to the Utah Afterschool Network (UAN), the statewide professional organization for afterschool programs, “Program quality is an ongoing process involving reflection and thoughtful assessment and is best accomplished through continuous practice that includes staff, parents, youth, and community partners” (UAN, 2011, para. 1). In an effort to support afterschool providers in their assessment efforts, the UAN utilized a statewide task force to develop a tool for assessing quality in programs.

The tool was developed by incorporating ideas from other proven quality assessment tools such as the NAA (National Afterschool Association) Standards for Quality School Age Care, School Age
Environment Rating Scale, and writing new indicators tailored to the specific needs of the state. As found in the “Learn New Skills” area of the assessment tool, quality programs include “interactive, project-based activities that encourage critical thinking and self-expression” (UAN, 2011, para. 6).

The assessment tool also has indicators to measure cognitive development, creativity, self-exploration and development, leadership, team work, social skills, self-responsibility, and service opportunities. These indicators for high quality programs are directly in line with what 4-H offers in curriculum and activities to improve these skills for youth of this age group.

All afterschool sites in Utah that have utilized the 4-H implementation approaches outlined above have scored very high on this assessment tool for quality. Based on this, it is anticipated that incorporating 4-H into afterschool programs can help to improve scores in similar areas of measurement using comparable quality assessment tools. For example, a study completed by Bunnell and Pate (2006), found that 99% of parents (N=287) either agreed or strongly agreed that the “4-H afterschool club is a place where their child learns new skills and interests” (p. 78). The same study also found that 94% of youth (N=506) stated they learned new skills and 93% felt that they developed more confidence about themselves in addition to many other positive outcomes (Bunnell & Pate, 2006).

**Conclusion**

As our communities grow and change, afterschool programs represent an avenue to bring resources to populations, which would otherwise not be available to them. These afterschool programs can not only provide a safe environment for youth to spend their afterschool hours, but can also provide them with positive and constructive learning opportunities and help fill the gaps of other educational programs. Continually striving to improve and provide quality programming in afterschool programs is essential in order to ensure the best outcomes for youth and make sure the program does not have the reputation of “flying by the seat of their pants” or simply being seen as a daycare facility.

Combining 4-H with the afterschool environment can be beneficial in raising the quality of afterschool programs being offered. 4-H faculty and staff provide expertise in youth development that can help others to develop new afterschool sites, strengthen well established programs and enhance the quality of all afterschool programs across the nation (Bunnell & Pate 2006). 4-H, with its ideology, goals, and tried and true practices, is an excellent way for afterschool programs to improve quality and ensure the youth are participating in a program that best meets their needs.

**References**


Self-Esteem and Feelings of Community Connectedness of At-Risk Adolescents Attending Community-Based Afterschool Programs

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Self-Esteem and Feelings of Community Connectedness of At-Risk Adolescents Attending Community-Based Afterschool Programs

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Abstract: This research investigated the relationship between adolescent afterschool program attendance, self-esteem and feelings of community connectedness. Thirty-nine of the 61 at-risk adolescents enrolled in two federally funded, community based afterschool programs participated in the study. Participants completed a 10-item self-esteem questionnaire and a 5-item section of the Youth Involved in Community Issues Survey (YICI) to measure perceptions of community connectedness. Attendance records were also collected from the sites. Data were analyzed using Pearson Correlations.

Results indicated that there was not a significant relationship between the total variables. The individual item analysis, however, did find a significant relationship between adolescent community connectedness and self esteem items. Findings suggest that there is a relationship to be explored and strengthened through means of community outreach for adolescents.

Conclusions from this study have important implications for youth practice. Specifically, program leaders need to help adolescents get involved in the community as contributing members.

Introduction

“Self-esteem is defined as a person’s overall sense of worth and well-being” (Arnett, 2010) and is an integral part of youth development. It is important that adolescents develop a high self-esteem from an early age and continue it into their adult lives. There are many factors that contribute to adolescent self-esteem, including: personal identity, personal achievements, family, friends, school, neighborhood, and community. Since adolescence is the period during which identity issues are most prominent and most crucial to development, Erickson (1950) stated that it is important that youth are able to establish a clear identity. Identity serves as a basis for initial commitments.
in adult life and as a foundation for later stages of development (Arnett, 2010). Self-esteem in adolescence can fluctuate as youth are striving to find their identity. Through positive youth development programs, however, a youth’s self-esteem can be strengthened, thus, allowing them to feel better about themselves, their identities, their families, friends, and the community in which they live. “While many techniques have been used to enhance adolescent self-esteem, afterschool program attendance and the opportunity to connect with the community can have a significant effect on the self-esteem of a youth who participates” (Saunders-Ferguson, Barnett, Culen & TenBroeck, 2008).

The use of one single approach can be difficult when trying to help diverse groups of adolescents, thus, communities, families, and schools must create opportunities for the youth to thrive in the environment in which they live, grow, go to school, and play. Afterschool programs and the chance to connect to communities through volunteer work provide youth with an outlet, a place to exhibit their strengths and gain a feeling of belonging and connectedness to their community (Barton, Watkins, & Jarjoura, 1997; Benson, 1998; Broadbent, & Papadopoulos, 2010; Halpern, 2005; O'Donnel, Michalak, & Ames, 1997; Schine, 1990; Ybrandt, & Armelius, 2010).

**Current Practices**

In adolescence, the middle and high school years are a time when many lifestyle changes are made. This can prove to be extremely difficult for adolescents in terms of their evolving self-esteem. This period brings change that is unfamiliar and often unwelcomed by adolescents that must adapt and overcome the unfamiliarity that has suddenly been thrust upon them. During the years of middle and high school, it is imperative that these changes be examined in efforts to help promote positive development in a time of such turmoil.

This literature review examines self-esteem of inner-city adolescents who felt connected to their communities through afterschool and community program involvement. The first section examines the self-esteem of youth who are involved in after-school programs in order to define the need for such programs and show the benefits that are incurred by the adolescents. This section examines afterschool programs that are in place and functioning in a manner that is beneficial to adolescents attending the program. The second section discusses community connectedness and how youth involved feel about the accomplishments and friendships they have made in the communities in which they live. It also examines the positive outcomes of programs that have encouraged youth to get involved in the local community as a means of building resilience.

**Inner City Youth, Self-Esteem and Afterschool Programs**

Adolescent self-esteem, behavioral and emotional status, and social context, including the peer group, family, and school social system, all play a role in adolescent aggressive behaviors. The unsupervised hours of the afternoon are a crucial time for adolescents. It is during these hours that adolescents tend to get in the most trouble simply because they have nothing to do. In a study conducted through a partnership with the local YMCA, three elementary, middle and high schools, 54 middle and high school students from low-income areas who were at high risk for behavioral problems were taken to mentor 584 elementary school-aged children during the afterschool hours (O'Donnell, et al., 1997). The teen mentors went through an intensive training process in order to qualify and were supervised at elementary schools. The aim was that the program be preventative and keep the teens off the streets, thus, services were provided for both the mentors and the mentees who participated. Through the afterschool program, both the mentors and mentees benefited from a bonding experience that heightened the self-esteem of all
involved. In fact, 89% of the mentors reported positive changes in themselves due to the employment opportunity. The program also gave the younger youth a safe place to go after school, helped them build a positive self-worth, and provided childcare for their parents. Overall, the program had positive effects on the youth, their families, and the community.

Inner-city youth programs operate with the aim to address the normative tasks of adolescents without neglecting the range of vulnerabilities like self-doubt and mistrust of others (Halpern, 2005). Adults have an important role to play in youth development and are essential for teaching developmental tasks. Many students have low self-efficacy and get lost in the hustle and bustle of large urban high schools, thus, afterschool programs are needed to help show these at risk students how to be good citizens. An afterschool program is a place where students can go and get extra support they need due to the deficit they are receiving at home or in school. Through the afterschool program, students will try out different roles, sample different kinds of experiences, question themselves and others, take risks and test limits. In order to service these children effectively, it requires a variety of persons and social resources as well as the youth being open to new experiences and willing to take the steps necessary to be able to succeed. Many of the youth suffer problems rooted in earlier life experiences such as loss of a family member, absentee/erratic parents, early pregnancy, dropping out of school, responsibility for younger siblings, pressure from gangs, contact with police, juvenile justice, and child welfare authorities (Halpern, 2005). The afterschool program provides a place for those that fall somewhere between school stars and the disconnected due to negative effects during their adolescence. Thus, afterschool youth programs need to create conditions for re-working as well as for developing self-hood (Halpern, 2005).

Positive Youth Development and Community Connectedness

Youth often have the opportunity to make a huge impact on the community and neighborhood in which they live. Communities also can help make the youth development process go as smoothly as possible by providing programs for youth to participate in that make them feel connected to their community and want to give back to it. High feelings of community connectedness have been proven to help adolescents with positive development. Community connectedness has also been found to act as a mediator for adolescents who have depressed or suicidal tendencies (Matlin, Molock, & Tebes, 2011).

Adolescents who tutor their peers or younger children, visit the aging, assist shut-ins, participate in programs to educate their communities about substance abuse, organize an action campaign to rehabilitate a building, improve a playground, clean up a stream, or advocate for the homeless are filling the void that our age of technology and alienation has created in their lives. Perhaps in more positive ways than their counterparts of an earlier era, they are assuming meaningful roles and responding to real needs of their society, as well as to their need to be needed (Schine, 1990). This participation in community development allows youth to obtain a feeling of belonging and contributing that sustains them even when the work is difficult or dull. For young people to learn most effectively from their participation in community service, however, they must have opportunities to reflect thoughtfully upon the meaning of their work. A youth’s desire to reach out to adults other than parents and teachers, a drive to test values, and an opportunity to try on new roles, are all important developments during the period of adolescence. Most, if not all, young adolescents will derive benefits from engaging in meaningful service to their community. Working with the very young or the aging, young volunteers enjoy the warm welcome and affection that greet them, and at the same time, their self-esteem is bolstered by the knowledge that they are valued and do, indeed, “make a difference” (Schine, 1990).
Many after school programs, such as the YMCA and Boys and Girls Club of America, offer youth volunteer opportunities that are often more appealing than those provided by schools, as youth do not feel restricted by the school schedule and are more able to do the kind of volunteer work that they really want to do. Establishing community service as an integral part of the program in middle level schools, however, can constitute an important first step in true reform. The challenge is to create environments and opportunities that will allow those qualities to develop, “to nurture young people in their initial quest toward an effective and satisfying adulthood” (Hornbeck, 1988). This community service policy identified the importance of community involvement in key decisions about schooling. One model aimed to promote self-confidence and self-esteem, develop life and problem solving skills, encourage the practicing of social skills, link youth into appropriate community services, and ultimately, facilitate engagement in education. This model is beneficial to all involved. The community receives a volunteer, the youth’s self-esteem is bolstered, and the school has fostered change in a young person.

Broadbent and Papadopoulos (2010) found that six in ten youth believed, as a consequence of participating, that they were now confident and they valued highly the experience of exploring and learning in their local communities. They also enjoyed engaging with diverse people, whether as a volunteer, assisting others, or engaging in new experiential learning and skill development. The program also improved the overall school performance of five out of ten youth. Learning can happen at home and in neighborhoods as well as at school—wherever young people with curious minds spend time. Thus, in schools that provide high quality teaching and an array of experiences and skill-building opportunities in a variety of community environments, learning is deepened and strengthened. Clearly, communities need to be environments where young people can avail themselves of such opportunities and it requires that communities, programs and governments work together in order to achieve long-term sustainable program outcomes and benefits (Broadbent, & Papadopoulos, 2010).

Local schools can also benefit from community centers as they may provide youth with anger problems and other disabilities with a place to let out their frustrations, whether it is by playing on a sports team or just interacting with other youth who are similar to them. The centers provide a place for cooperative learning and are a great resource to schools. The centers allow schools to focus on educating youth, rather than trying to fix their problems while educating them. The center ultimately can provide a support system for youth to develop skills and competencies; provide youth with opportunities to practice new behaviors and take on challenging roles; encourage civic involvement and provide opportunities for youth to feel connected and valued (Martin, & Tennant, 2008).

Having a sense of community represents a social economy of shared intimacy based on self-disclosure and feelings (McMillan, 1996). This suggests that individuals who do not have a sense of community are at greater risk for feelings of social isolation and alienation, which may lead to experiences of loneliness and low self-esteem (Chipuer, 2001). An adolescent’s feeling of connectedness to peers, parents, neighborhood and local communities are important to the developmental process and are predictors of a youth’s self-esteem and ultimate life satisfaction (Barnett, & Diehl, 2012). Youth may ultimately be empowered to become a critical component of the community development process and ultimately be engaged in the local policy planning, implementation, and evaluation as equal players (Barnett, & Brennan, 2006).
**Methods**

**Research Design**
The study employed a quasi-experimental design which has the purpose of establishing a cause and effect relationship between an independent variable and a dependent variable, but the assignment of subject to treatment conditions is not at random (Cook, & Campbell, 1979). This study specifically examined whether a program or treatment caused some outcome or outcomes to occur by examining the relationship of key variables. Adolescents were not randomly selected but were chosen based on their participation in an afterschool program. Quasi-experimental designs do determine the relationship between two or more variables as well as the direction of the relationship between the variables. For this study, the independent variable was Adolescent self-esteem and the two dependent variables were a) Adolescent’s feelings of community connectedness; and b) Adolescent’s afterschool program attendance.

**Data Collection**
For each of the two county afterschool program sites, a time was coordinated with the program director to come to the program and collect the data. All students present on the day of collection were asked to participate in the data collection process. Afterschool program participants were reminded that their participation was voluntary and that their responses would remain confidential and anonymous by placing a number on their survey rather than their name. At the time the data was collected, there were 61 students enrolled in the after school program. All youth participated in all or part of the study, but 22 of the 61 responses were not used for data analysis due to incomplete measures of program attendance maintained by staff on site. A total of 39 participants out of 61 enrolled students (63.9%) including 17 males, (43.6%), 21 females (53.8%), and one unidentified sex (2.6%) participated in the study. The ages of the 39 youth participants in the study ranged from 11-18. As follows: ages 11-four youth (10.2%); 12-12 youth (30.8%); 13-eight youth (20.5%); 14-seven youth (17.9%), 15-three youth (7.7%), 16-three youth (7.7%); 18-one youth (2.6%); and unidentified age- one youth (2.6%). Respondent’s race was identified as follows: African American-29 youth (74.4%), Hispanic/Latino-six youth (15.4%); Caucasian-two youth (5.1%); and unidentified race-two youth (5.1%).

Self-esteem was measured using the Rosenberg’s (1965) 10-item Self-esteem Scale which consists of statements dealing with general feelings about the self. The complete scale took about 10 minutes for completion and proved to be a reliable measure of self-esteem with a Cronbach’s Alpha score of .758. The questionnaire consisted of the following conceptual areas: a) Self-worth; b) Success or failure; c) Ability; and d) Attitude. Each item consisted of answers ranging from 0, "strongly agree” to 3, and "strongly disagree”. Some items were reverse coded so that 3 represented “strongly agree” and 0 “strongly disagree”. The raw score was measured and ranged from one the lowest level of self-esteem to 30 the highest level of self-esteem. Those with low levels of self-esteem were designated as having self-esteem scores that ranged from 0-10 and were assigned to group 1; mid range self-esteem scores ranged from 11-20 and were assigned to group 2; and a high level self-esteem score was classified as 21-30 and assigned to group 3.

To assess adolescent perceptions/feelings of community connectedness, a 5-item index measure of the variable was taken from the Youth Involved in Community Issues Survey (YICI) (Barnett, & Payne, 2010). The community connectedness scale took approximately five minutes to complete. The 5-item survey measured community connectedness on a five point scale ranging from 1, strongly disagree to 5, strongly agree. The YICI survey was administered to all 39 participants in the afterschool program study in June 2011. The following five YICI survey items measured perceptions of community connectedness: a) Youth in my community have a voice; b) I feel...
These questions allowed the researcher to determine whether or not the adolescent’s felt as though they were valued in the community and whether they were willing to go into the community and make decisions. The measure of perceptions/feelings of community connectedness ranged from 5-25. Those reporting low feelings of community connectedness were identified with a score of 5-11 and were assigned to group 1. Those with mid level feelings of community connectedness were those with a score of 12-18 and were assigned to group 2, and those reporting high feelings of community connectedness were those with scores of 19-25 and were assigned to group 3.

**Data Analysis/Results**

Data analysis was performed using SPSS 20.0, a statistical software program for social science research. For this analysis, Pearson Parametric correlations were used and found that a relationship between the variables did exist. Although most of the variables did not prove to have a strong positive relationship, they did exhibit a positive relationship with increased feelings of self-esteem and increased afterschool program attendance relating to increased feelings of community connectedness. In other words, as self-esteem of youth and their attendance in the program went up, their feelings of community connectedness also moved in a positive direction. There were a number of inter-item correlations between the items asked of participants in the study that provide further insights into their perceptions of the two variables, self-esteem and community connectedness (See Table One).
### Table 1
Self-esteem and community connectedness Pearson Correlation

<table>
<thead>
<tr>
<th></th>
<th>Youth in my community have a voice.</th>
<th>I feel connected to my community.</th>
<th>I am not interested in what goes on in my community.</th>
<th>I am able to influence decisions that affect my community.</th>
<th>I do not feel I have a positive impact on my community.</th>
<th>Total Community Connectedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the whole I am satisfied with myself.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-262 (.107)</td>
<td>-107 (.517)</td>
<td>-.054 (.743)</td>
<td>-.075 (.651)</td>
<td>.097 (.557)</td>
</tr>
<tr>
<td>At times, I think I am no good at all.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.172 (.294)</td>
<td>.015 (.926)</td>
<td>.208 (.203)</td>
<td>.065 (.694)</td>
<td>.074 (.654)</td>
</tr>
<tr>
<td>I feel I have a number of good qualities.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.200 (.221)</td>
<td>-.053 (.748)</td>
<td>.232 (.156)</td>
<td>.005 (.976)</td>
<td>.131 (.427)</td>
</tr>
<tr>
<td>I am able to do things as well as most other people.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.201 (.221)</td>
<td>-.036 (.830)</td>
<td>.077 (.639)</td>
<td>-.014 (.933)</td>
<td>.048 (.772)</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.226 (.166)</td>
<td>.000 (1.00)</td>
<td>.158 (.336)</td>
<td>-.103 (.538)</td>
<td>.125 (.447)</td>
</tr>
<tr>
<td>I certainly feel useless at times.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.332* (.042)</td>
<td>-.142 (.395)</td>
<td>.281 (.088)</td>
<td>-.099 (.553)</td>
<td>.163 (.328)</td>
</tr>
<tr>
<td>I feel that I'm a person of worth, at least on an equal plane with others.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>.152 (.355)</td>
<td>.207 (.207)</td>
<td>.030 (.854)</td>
<td>.126 (.443)</td>
<td>-.035 (.831)</td>
</tr>
<tr>
<td>I wish I could have more respect for myself.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.455* (.004)</td>
<td>-.445* (.005)</td>
<td>.177 (.281)</td>
<td>-.240 (.142)</td>
<td>.272 (.094)</td>
</tr>
<tr>
<td>All in all, I am inclined to feel that I am a failure.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.256 (.115)</td>
<td>-.139 (.400)</td>
<td>.374* (.019)</td>
<td>-.259 (.111)</td>
<td>.335* (.037)</td>
</tr>
<tr>
<td>I take a positive attitude toward myself.</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.230 (.158)</td>
<td>-.129 (.434)</td>
<td>.115 (.486)</td>
<td>-.155 (.346)</td>
<td>.145 (.379)</td>
</tr>
<tr>
<td>Total Self-Esteem</td>
<td>Pearson Correlation Sig. (2-Tailed)</td>
<td>-.388* (.015)</td>
<td>-.172 (.294)</td>
<td>.273 (.092)</td>
<td>-.155 (.347)</td>
<td>.225 (.169)</td>
</tr>
</tbody>
</table>

*Significant at 0.05  **Significant at 0.01

The research also found a significant relationship between self-esteem and community connectedness on seven different individual items. The individual item correlations proved to be more significant than the correlation found between total self-esteem and feelings of community
connectedness. The researcher’s hypothesized that an increase in afterschool program attendance would result in an adolescent’s increased feelings of community connectedness. This hypothesis was accepted since the correlation between variables was significant with a Pearson Correlation score of .3578 and a significance score of .026. This finding is extremely important as it proves that there is a relationship between adolescent feelings of community connectedness and afterschool program attendance. The statistical analysis presented in this study has shown a correlation between the variables selected. There is a significant relationship evident between the individual items contained in each variable, specifically, in the relationship between self-esteem and feeling of connectedness to the community in which the participants live. Particularly alarming is the finding that amongst the participants in the survey, there was no correlation between afterschool program attendance and self-esteem. However, since it was a sample of convenience taken of students who already attend the program, some for more than a year, it could be possible that the afterschool program had already helped the students with their self-esteem and feelings of community connectedness. Pre- and post self-esteem and feelings of community connectedness measures may have possibly produced different findings than this study on the relationships between the existing level of self-esteem and the other variables.

Discussion

Adolescence is a developmental stage characterized by many corresponding changes, including those in physical, emotional, cognitive, social and moral domains. As youth experience these changes, they often have a decline in self-esteem related to their changing states of self (Arnett, 2010). Numerous factors have been proven to affect an adolescent’s self-esteem, both negatively and positively. Through after school program attendance, the adolescent may not only become more resilient to changes going on around and inside them, but they may also have increased feelings of community connectedness.

Although afterschool program attendance was not proven to have a significant effect on an adolescent self-esteem, participants in this study reported higher levels of self-esteem than expected, which left little room for growth. Afterschool program attendance in previous studies has been proven to increase adolescent self-esteem, but in this study, a direct relationship cannot be determined. Still, there are some interesting findings from this study for practitioners to think about as they work with these more extreme populations in regard to risk.

For example, adolescent self-esteem and afterschool program attendance of those who participated in this study showed great variance in some areas (attendance) and very little variance in others (self-esteem). Although these results cannot be identified as causal, it is suggested through previous research that adolescents with higher self-esteem do attend afterschool programs. In this study, the relationship between the two is not definite as the adolescents in this particular program are given the choice of whether or not to attend. Therefore, it may not be the level of self-esteem that prompted them to attend or not attend the afterschool program. It is possible that the students not required by the program to attend were required by their parents to attend; thus, their self-esteem is perhaps not affecting that decision, their parents are possibly affecting it. Many of the program participants also attend as a recommendation by the school. Again, the decision to attend may not be directly influenced by their choice, but possibly by a higher authority.

Community connectedness is an important aspect of an impactful afterschool program. When an afterschool program has the ability to help youth connect to their community, the program is assisting the adolescent’s development in many areas. Not only is the feeling of community
connectedness beneficial to an adolescent’s self-esteem, it also allows them to feel appreciated by the members of their community. This appreciation of adolescents allows the youth to begin to take ownership of their community as it becomes more meaningful to them and encourages them to want to contribute positively to it.

Specific items in this study correlated with one another that focus on the community connectedness aspect of the program and its’ impact on their feelings about connectedness. For example, the item *Youth have a voice in this community* has a significant inverse relationship with the item *I certainly feel useless at times* and *I wish I could have more respect for myself*. This relationship indicates that as youth having a voice in the community increases, these negative feelings about themselves decreases. The relationship with total self-esteem, however, is more difficult to understand, but may be explained by the unusually high initial self-esteem scores that allow little room for increase, therefore, any changes that the adolescents report in self-esteem may actually show a decline in self-esteem. A significant inverse relationship was also found between the items *I feel connected to my community* and *I wish I could have more respect for myself*, which explains that as youth feel more connectedness to their greater environmental context, their need for more self-respect declines because self-respect is likely enhanced when their connectedness increases.

Conversely, and perhaps more importantly, youth reporting that *All in all, I am inclined to feel like a failure* also has a significant inverse relationship with *I do not feel I have a positive impact on my community*, lending further evidence that empowering youth to have a voice about local community matters and is preventative in regard to these negative aspects of self. These inter-item relationships provide evidence related to the impact of increasing community connectedness in afterschool programs for youth respective to development of their self-esteem. It is often beneficial to allow adolescents to have the ability to participate and volunteer to help with community events. This is a way for adolescents to have a greater presence in the community and have their voices heard by the community. Recognition by members of the community and the ability to help others in their area, whether it is the young or the old, will help adolescents develop a high self-esteem. This study shows that adolescents who feel as though they have a voice in their community will have more respect for themselves. Having more respect for oneself transcends across many areas of the adolescent’s life and will help them to have more respect for everyone around them.

**Implications for Further Research**

For further research, self-esteem and feelings of community connectedness measures might be taken at least twice during the study. Collecting these two data sources twice rather than once will hopefully show variance in the scores that are collected and potentially find a relationship between the three variables: afterschool program attendance, self-esteem and feelings of community connectedness. Also, if measuring afterschool program attendance, it is imperative that proper record keeping is taking place. Afterschool program attendance has been identified as a variable in many studies, but would be best-suited if analyzed based on both frequency and consistency of attendance. Another suggestion for further research is to compare self-esteem and community connectedness measures on both adolescents who do not attend the afterschool program and those who do attend. This would hopefully show some variance between the two groups and indicate a stronger relationship between afterschool program attendance, self-esteem and feelings of community connectedness among those who attended programs as opposed to those youth who did not.
In order to determine a relationship between self-esteem and feelings of community connectedness in further research, a larger sample size is also suggested. A sample that spans ethnic groups will potentially identify differences and similarities in areas not limited to the relationship between self-esteem and community connectedness, but also the relationship between age, race, self-esteem and feelings of community connectedness. The larger sample size would hopefully yield a range of scores from low to high in both self-esteem and community connectedness. This range of scores will allow for further examination of the relationships and presumably reveal that feelings of community connectedness and self-esteem are directly related.

These suggestions are made based on the limitations of this study that was conducted using a sample of at-risk youth enrolled in an afterschool program specifically focused on at-risk youth. The program was grant funded to provide a free afterschool program to disadvantaged youth considered to be very at-risk due to their SES level, the highly disorganized neighborhoods in which they lived, and the transitory nature of their migrant families. This study did not have access to a comparative or control group through the local school district; therefore, the participants were limited to those enrolled in the program. The study did have the opportunity, however, to focus on two very at-risk youth populations that might be considered extreme in contrast to the typical youth, as they are faced with very adverse circumstances.

**Practice**

For youth workers, the results of this study are particularly important. Self-esteem and feelings of community connectedness are extremely important to an adolescent’s successful development into an adult who can thrive in any situation. After school programs must be places that bolster self-esteem and feelings of community connectedness in order to create resilient adolescents. For those youth workers engaged in providing supports to at-risk youth populations, this study has found evidence regarding the importance of making connections to the community for enhancing self-esteem for these particularly vulnerable populations. It is not known, however, why these youth reported such high self-esteem scores, but it is hoped that the program had already had a substantial impact on their development of self, as some of the youth had been enrolled in the program for one year at the time of the data collection, therefore, the baseline measure may have already been raised higher for these youth.

In order to bolster adolescent self-esteem and feelings of community connectedness, it is important to get the adolescents out in the community in which they live so that they are able to elicit change and feel as though they are a contributing member of the community, instead of a mere resident. For adolescent’s voices to be heard in the community, afterschool programs could hold community outreach events where the adolescents showcase talents and skills that they have learned while attending the afterschool program.

When adolescents begin to feel as though they have a voice in their community, according to these findings, they will begin to feel greater respect for themselves. With greater feelings of respect for themselves, heightened self-esteem and greater feelings of community connectedness will follow. If possible, afterschool programs should have their participants sign a contract saying that they will regularly attend the program. Of course the parent will make the final decision, but if the adolescent feels as though they are valued and are given the opportunity to make decisions for themselves, great growth will occur.

**Program Staff**

For the staff of this afterschool program and afterschool programs like it, it is important that they use this research to make the necessary changes that the adolescents who attend the program
desire. Specifically, adolescents need to be given a voice in what goes on not only in the program, but in the community as well. In order for adolescents to feel confident enough to let their voice be heard in the community, they must begin by being given an equal voice in the program thus allowing them to be seen as an asset. What this translates to in the application of these findings is that the program leaders and facilitators will give the adolescent the opportunity to make decisions about what goes on at the program. In doing this, the youth will not only begin to enjoy the program even more, but it may also give the program the opportunity to grow through word of mouth and community outreach, all the while building connections between the youth, the program, and the community that they live in.

Summary

The results of the study found that there was a significant relationship between an adolescent’s afterschool program attendance and self-esteem or feelings of community connectedness among the adolescents who attended the federally funded afterschool program. Although no direct correlation was found between an adolescent’s self-esteem and feelings of community connectedness, correlation was found between individual items. Most importantly, adolescents felt that they could have greater respect for themselves if they had a voice in their community. This is significant because the adolescent’s clearly feel as though they would respect themselves more if others also respected them.

The results of this study can be used to develop programs that allow adolescents to participate in community outreach events that allow them to have their voices heard. This will allow adolescents to take ownership of their community while developing a greater respect for themselves, their community, and the people in it. This can become the focus of afterschool programs that are community based and infuse self-esteem building activities. As youth workers strive to create effective youth programs, they can consider the findings of this study that provide evidence that afterschool programs and community connectedness do have an impact on an adolescent’s self-esteem and positive identity development.

References


The 8th Habit (2004)

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The 8th Habit (2004)

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Abstract: Youth development professionals are on the leading front in helping to prepare our youth and volunteers for success in the information or knowledge worker age. As such, these professionals are being subjected to tremendous changes in their individual and professional lives amidst the current economic challenges. The 8th Habit (2004) by Covey is a resource that youth development professionals can use to improve themselves as “whole persons” and help inspire those they serve to reach their potential, thus enhancing our communities and organizations.

Resource Overview

The 8th Habit (2004) by Stephen Covey builds on his previous work in The 7 Habits of Highly Effective People (1989) by sharing a model and framework from personal effectiveness to organizational greatness. Covey presents a model taking the reader through the following sections:

- whole person paradigm (body, mind, heart, and spirit),
- 4 basic human needs (to live, to love, to learn, to leave a legacy),
- 4 intelligences/capacities (physical, emotional, mental, spiritual),
- leadership attributes (discipline, passion, vision, conscience), and
- leadership roles (aligning, empowering, pathfinding, and modeling).

The book is written within the context of the information or knowledge worker age where individuals are needed and expected to be creative and adaptive with rapidly developing technologies, thoughts, and systems.

The book comes with a companion DVD that includes 16 video vignettes which are referenced throughout the book as supplements reinforcing key points. The appendices contain a number of practical tools and resources from a section on developing the 4 intelligences to a literature review of leadership theories. Applicable quotes and narratives are shared throughout helping with readability and clarity of key points. The 8th Habit Personal Workbook (2006) is also available as a companion resource to help extend the learning. No limitations with this resource were noted.
Connection to Youth Development
Youth development professionals are on the leading front in helping to prepare our youth and volunteers for success in the information or knowledge worker age. The 8th Habit has value in helping remind youth development professionals of the importance of keeping balance in their own lives and provides a framework for implementation so that they can influence and empower the development of the youth and volunteers they serve.

The 8th Habit can be purchased at most book retailers in the following format and estimated cost: Book - $10; Audio CD - $30 unabridged; Personal workbook - $11.

References