

## CHALLENGES OF SERVICE-LEARNING IN TENNESSEE 4-H YOUTH DEVELOPMENT: A DELPHI STUDY

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### Abstract

*Service-learning is growing in popularity as a methodology for teaching youth life skills and 4-H project knowledge. Through a modified Delphi technique, a panel comprised of 4-H'ers, volunteers, and agents in Tennessee identified challenges of utilizing service-learning to fulfill the mission of the state's 4-H Youth Development program. The subpanels of 4-H youth, volunteers, and Extension agents found that primary challenges of conducting service-learning projects through 4-H Youth Development include coordination, working around everyone's schedule, and funding. There were some differences among the subpanels' lists and prioritization of the challenges. The study has implications for 4-H leaders, both youth and adult, who employ service-learning as a teaching tool.*

### Introduction/Theoretical Framework

Since its inception in 1902, the 4-H Youth Development program has outlined community service as one of its primary objectives. In October 2000, Tennessee 4-H Youth Development expanded that service commitment to include service-learning, a form of experiential education where youth apply knowledge, skills, critical thinking, and wise judgment to address genuine community needs (Toole & Toole, 1994). Service-learning is a growing methodology for fulfilling the 4-H mission of helping youth develop skills and attitudes they need to become successful adults. After receiving a 3-year grant from the Tennessee Commission on National and Community Service and Learn and Serve America, the Extension Service began a statewide initiative to infuse service-learning throughout the 4-H Youth Development program (Mantooth & Hamilton, 2004). The program provided training and resources for youth and adults, as well as opportunities for funding and recognition for projects. From October 2000 until December 2003, more than 182,000 4-H'ers partnered with 14,800 adults to conduct 5,300 service-learning projects, benefiting more than 901,000 people through

585,000 hours of service (Mantooth & Hamilton).

Nationally, service-learning can trace its theoretical roots to John Dewey, Alexis de Tocqueville, William James, and Thomas Jefferson, as well as historical movements such as the push for civil rights in the 1960s (Waterman, 1997a). Dewey is credited with conceptualizing ideas of experiential education and reflective thinking, both vital components of service-learning. Dewey's work also provided the foundation for key elements of service-learning, such as student involvement in developing learning objectives, working cooperatively on learning tasks, linking what is learned to personal experience, placing importance on social and not just intellectual development, and valuing actions for the welfare of others (Kraft, 1996).

In 1910, American philosopher William James called for a program of national service for youth that would serve as the moral equivalent of war, something that would speak to men's souls as universally as war did and yet be compatible with their spiritual selves (Waterman, 1997a). The twentieth century saw many large-scale efforts to engage youth in service, including the Civilian Conservation Corps, the Peace Corps, Volunteers in Service to America, the

Youth Conservation Corps, and other organizations that sought to benefit the volunteers who were serving their communities (Corporation for National and Community Service, N.d.; Kraft, 1996; Pritchard, 2002; Waterman, 1997b). Additionally, service-learning gained national attention with the passage of the National and Community Service Trust Acts of 1990 and 1993.

This legislation established the Corporation for National and Community Service (CNCS), a federal agency that provides grants for both school-based and community-based service programs. School-based service-learning is organized as part of the academic curriculum of an elementary or secondary school or an institution of higher education, whereas community-based service-learning is organized through a community agency or youth-serving organization (National and Community Service Trust Act of 1993). While much attention has been given to school-based service-learning, community-based efforts have also grown over the past 10 years. The CNCS has awarded more than \$37 million to community-based organizations and state service commissions, and a substantial amount of community-based service-learning is occurring beyond what is funded through the CNCS (Bailis & Lewis, 2003).

The number of youth engaged in service is increasing. Skinner & Chapman (1999) revealed that 64% of all public schools had students involved in service activities recognized and/or arranged through the school, and 32% of all public schools organized service-learning as part of their curriculum. Shumer and Cook (1999) reported that 6.1 million high school students were involved in service-related programs in 1997, and Safrit and Auck (2003) found that 98% of Ohio 4-H'ers had voluntarily helped others within the previous year.

The increasing number of youth involved in service-learning has sparked a growing field of research on the impact of service-learning. Because the youth engaged in service-learning are often outside the classroom, interacting with community members and organizations, impacts of service learning are not limited to youth.

Indeed, researchers (Billig, 2000; Scales & Leffert, 1999; Melchior, 1999) have found an impact on youth, schools and community organizations through which they work, and communities they serve.

Youth participating in service-learning programs, both school-based and community-based, show increased self-esteem and problem-solving skills, more positive attitudes toward adults, and increased concern for others' welfare (Scales & Leffert, 1999). Service-learning also has a positive impact on students' civic attitudes and participation, particularly if students remain active in organized service activities (Melchior, 1999). Other benefits of service-learning include more positive perceptions of youth by community members, increased school cohesiveness, and improved services to clients of community agencies (Billig, 2000; Melchior, 1999).

Despite the benefits researchers have found, challenges can often hinder the effectiveness of service-learning. Shumer (1997), Wade (1997), and Ogden (2002) observed challenges with implementing service-learning in both school-based and community-based programs. Service learning required more planning time, more coordination with community organizations and partners, and more administrative support (Shumer; Wade). Other challenges included lack of leverage on the part of youth, lack of time, and lack of sustainable funds (Ogden).

Service-learning has evolved from John Dewey and the Peace Corps to millions of school students and youth in community-based organizations. An increasing number of service-learning participants has been reflected in an ever-growing body of research. Despite the number of community-based organizations that are engaging in service-learning and the increasing amount of research in the field, "community-based service-learning is the least understood and least studied of the streams of service-learning" (Bailis & Lewis, 2003, p. 17). Therefore, understanding the challenges of service-learning in community-based organizations, particularly 4-H Youth Development, is a problem due to the lack

of research on community-based service-learning.

### Purpose and Objectives

The purpose of this study was to identify challenges of service-learning in Tennessee 4-H Youth Development. Furthermore, the researchers sought to describe perceived differences among three subgroups: 4-H members, volunteers, and Extension agents.

### Procedures

Researchers used the modified Delphi technique with a panel of experts to generate data for the study. The Delphi technique is a method of group communication that is effective in allowing a group of experts, as a whole, to deal with a complex problem (Linstone & Turoff, 1975). The technique uses sequential questionnaires developed through summarized information and feedback of opinions from earlier responses (Delbeq, Van de Ven, & Gustafson, 1975).

Panel members (N = 30) were purposefully selected from individuals who served as youth coordinators, adult volunteer coordinators, or Extension contacts for 10 service-learning projects funded by 4-H Seeds of Service mini-grants between April 2001 and October 2003. The researchers reviewed grant proposals, reports, and reflection activities for 100 grant-funded projects and selected for the panel those that best demonstrated youth leadership, intentional learning objectives, reflection activities, and projects that lasted longer than one week. The panel consisted 10 4-H members, 10 adult volunteer leaders, and 10 4-H agents from one urban county, three suburban counties, and six rural counties. The members represented the three regions of University of Tennessee Extension, providing statewide scope to the study. Youth, volunteers, and Extension agents comprised separate subpanels due to the groups' varying developmental level, focus, needs, and experience with service-learning.

The researchers administered a series of three questionnaires to participants. The first questionnaire consisted of an open-ended question—"The challenges of conducting service-learning projects through 4-H Youth

Development are . . ."—that generated a list of challenges of service-learning implemented through the 4-H Youth Development program. The researchers summarized responses from the first questionnaire and eliminated any duplicate responses. Three, second-round questionnaires, one for each subpanel, were developed from the responses provided in round one. The second-round questionnaires asked participants to rate responses on a Likert-type scale of 1 (most important) to 9 (least important). The third round questionnaires ranked the responses to each question from most important to least important by arithmetic mean. Panel members were provided with the subgroup's mean and their own rating for each item. In addition, they were asked to explain why they disagreed with the rankings, if they did. A panel of experts, consisting of three faculty members and two 4-H Youth Development specialists, determined face and content validity for each instrument. Trustworthiness was established by gathering statements from the panel of experts, consisting of youth and adults who served in leadership roles for 4-H Seeds of Service grant-funded projects, and utilizing those statements on the second and third questionnaires (Taylor & Bogden, 1998).

First round questionnaires were mailed to study participants. Participants had the option of responding through a paper copy or Web-based questionnaire. Subsequent questionnaires were distributed to panel members either through the mail or e-mail, based on respondents' preferred method of receiving correspondence as indicated through the first Web-based questionnaire.

In round one, 18 panel members responded through the on-line questionnaire and 7 mailed or faxed their questionnaires, providing an 83% (N = 25) response rate. The 4-H youth subpanel had a 60% (N = 6) response rate; the volunteer subpanel had a 90% (N = 9) response rate; and the Extension agent subpanel had a 100% (N = 10) response rate. For this, as well as subsequent rounds, non-respondents were contacted in an effort to achieve 100% response for each subpanel. Responses from the three subgroups were maintained separately. Data generated by youth panel

members were not considered until signed informed consent statements were on file with the researchers.

The 4-H youth subpanel (N = 6) generated 51 statements, which were summarized to 21 challenges. The volunteer subpanel (N = 9) generated 64 statements, which were summarized to 25 challenges. The Extension agent subpanel (N = 10) generated 75 statements, which were summarized to 21 challenges.

In round two, 20 panel members responded on-line, and 4 mailed or faxed their surveys, providing an 80% response rate. The 4-H youth subpanel had a 70% (N = 7) response rate; the volunteer subpanel had an 80% (N = 8) response rate; and the Extension agent subpanel had a 90% (N = 9) response rate. As with the first questionnaire, responses from the subgroups were maintained separately.

The researchers calculated the arithmetic mean and standard deviation for each response (Ary, Jacobs & Razavieh, 1996). Mean scores of the round two questionnaires were used to determine importance of each statement. Responses were categorized as "important" (1 – 2.49), "slightly important" (2.5 – 4.99), "slightly unimportant" (5 – 7.49) or "unimportant" ( $\geq 7.5$ ). A standard deviation of  $\leq 1.5$  indicated that consensus was reached within the subpanel. These data were used to develop the third and final round of questionnaires.

Twenty-two panel members responded on-line, and three mailed their surveys,

providing an 83% response rate to the third questionnaire. The 4-H youth subpanel had a 70% (N = 7) response rate; the volunteer subpanel had an 80% (N = 8) response rate; and the Extension agent subpanel had a 100% (N = 10) response rate. Responses from the subgroups were maintained separately.

## Findings

In this study, a purposefully selected panel of 4-H youth, volunteers, and Extension agents was utilized to generate and prioritize challenges of conducting service-learning projects in Tennessee 4-H Youth Development.

### *Challenges Identified by 4-H Youth Subpanel*

The 4-H youth subpanel rated the importance of 21 challenges of conducting service-learning projects through 4-H Youth Development. The mean and standard deviation for each statement are recorded in Table 1. The statements are prioritized in order of most important to least important by average arithmetic mean scores. The 4-H youth subpanel reached consensus on four of the six challenges ranked as "important." Some of these statements include *working around everyone's schedule* ( $M = 1.85, SD = 0.89$ ); *not having enough time* ( $M = 2.14, SD = 0.90$ ); *maintaining good communication among all parties* ( $M = 1.86, SD = 1.07$ ); and *getting others involved and keeping them dedicated* ( $M = 2.29, SD = 1.50$ ).

Table 1  
*Delphi Study Round Two: Prioritized List of Challenges Identified by 4-H Youth Subpanel*  
 (N = 7)

Challenge	M	SD
1. Working around everyone's schedule.	1.85	0.89 <sup>a</sup>
2. Maintaining good communication among all parties.	1.86	1.07 <sup>a</sup>
3. Not having enough time.	2.14	0.90 <sup>a</sup>
4. Getting others involved and keeping them motivated and dedicated.	2.29	1.50 <sup>a</sup>
5. Lack of funding.	2.43	1.62
6. Planning and budgeting.	2.43	1.72
7. Logistics – planning and making sure everything is going as planned.	2.57	0.98 <sup>a</sup>
8. Organizing the group and keeping everyone on schedule.	2.57	1.27 <sup>a</sup>
9. Finding enough volunteer leaders.	2.57	1.72
10. Disagreements within the group; getting everyone heard without feelings getting involved.	3.00	1.60
11. Selecting a quality (truly meaningful) project that everyone wants to do.	3.00	1.73
12. Equipment – getting, storing, setting up for project.	3.29	1.11 <sup>a</sup>
13. People not reporting to work.	3.29	2.43
14. Organizational difficulties.	3.43	1.27 <sup>a</sup>
15. Being able to find other organizations to help.	3.43	1.71
16. Having one person responsible for keeping records and scheduling projects.	3.57	0.98 <sup>a</sup>
17. Paperwork; keeping records.	4.00	1.63
18. Having people who do not appreciate what you're doing.	4.43	2.57
19. Publicity.	4.57	2.30
20. Having someone talk bad about you and the project.	4.89	2.73
21. Missing other activities and time with family and friends.	5.14	2.27

*Note.* Likert scale: 1 – 2.49 = Important; 2.5 – 4.99 = Slightly Important; 5 – 7.49 = Slightly Unimportant;  $\geq 7.5$  = Unimportant.

<sup>a</sup> Consensus of Group.

The main purpose of round three is to obtain consensus among panel members and to provide an opportunity for panel members to disagree with the ranking of any statements. Therefore, in round three, five of the seven 4-H youth subpanel members disagreed with the ranking of six statements. According to the panel members, *getting others involved and keeping them motivated and dedicated*, should have been ranked higher in importance because they considered it more challenging. However, panel members thought three of the six statements (*people not reporting to work, being able to find other organizations, and publicity*) were not as important and were considered less of a challenge. The last two statements, *having people who do not appreciate what you're doing* and *having someone talk bad about you and the project*, received opposing comments.

#### *Challenges Identified by Volunteer Subpanel*

The volunteer subpanel rated the importance of 25 challenges of conducting service-learning projects through 4-H Youth Development. The mean and standard deviation for each statement are described in Table 2. The statements are prioritized in order of most important to least important by average arithmetic mean scores. The volunteer subpanel reached consensus on five of the seven challenges ranked as "important." The five statements are *coordination, working around everyone's schedule* ( $M = 1.57, SD = 0.53$ ); *keeping up motivation, interest, participation, and commitment* ( $M = 1.71, SD = 0.95$ ); *filling out paperwork for the project* ( $M = 2.00, SD = 1.15$ ); *funding* ( $M = 2.29, SD = 1.25$ ); and *learning how much is too much to undertake within a project* ( $M = 2.38, SD = 1.19$ ).

Table 2  
*Delphi Study Round Two: Prioritized List of Challenges Identified by Volunteer Subpanel*  
( $N = 8$ )

Challenge	<i>M</i>	<i>SD</i>
1. Coordination; working around everyone's schedule.	1.57	0.53 <sup>a</sup>
2. Keeping up motivation, interest, participation, and commitment.	1.71	0.95 <sup>a</sup>
3. Filling out paperwork for the project.	2.00	1.15 <sup>a</sup>
4. Funding; having difficulty getting supplies/equipment.	2.29	1.25 <sup>a</sup>
5. People not showing up to work.	2.29	1.60
6. Learning how much is too much to undertake within a project.	2.38	1.19 <sup>a</sup>
7. Getting enough adults involved.	2.38	2.00
8. Knowing the difference in a need and what would just be a fun time.	2.50	1.69
9. Knowing how to measure the success of the project/program.	2.71	1.38 <sup>a</sup>
10. Missing other activities; spending time away from family and friends; falling behind in other tasks.	3.00	2.16
11. Getting enough teens involved.	3.00	2.31
12. Time limits; having time to complete the project; meeting deadlines.	3.14	2.41
13. Picking a project with an impact on a large number of people.	3.57	1.13 <sup>a</sup>
14. Transportation.	3.57	1.27 <sup>a</sup>

Challenge	<i>M</i>	<i>SD</i>
15. Getting group to “buy in” and understand project goals and objectives.	3.57	1.98
16. 4-H’ers not getting along.	4.42	2.14
17. Volunteers not having a good connection with the instructor.	4.50	2.39
18. Volunteers thinking they do not get enough help on their project.	5.38	2.45
19. Having a place to meet.	5.71	1.97
20. Volunteers thinking the project is different than they expected.	5.75	1.91
21. Volunteers finding out they are not “cut out” for this.	6.38	2.00
22. The weather.	6.43	1.90
23. Volunteers becoming bored because the project takes too long.	6.43	2.30
24. Volunteers thinking they have “been there, done that!”	7.25	1.75
25. That the project doesn’t challenge volunteers enough.	7.50	1.85

*Note.* Likert scale: 1 – 2.49 = Important; 2.5 – 4.99 = Slightly Important; 5 – 7.49 = Slightly Unimportant;  $\geq 7.5$  = Unimportant.

<sup>a</sup> Consensus of Group.

The main purpose of round three is to obtain consensus among panel members and to provide an opportunity for panel members to disagree with the ranking of any statements. Therefore, in round three, four of the eight volunteer subpanel members disagreed with the ranking of 13 statements. Some panel members thought two of the 13 statements (*getting enough adults involved* and *getting enough teens involved*) should be ranked higher in importance because they thought involvement was more of a challenge. However, panel members thought 11 statements: *getting groups to “buy in” and understand project goals and objectives*, *4-H’ers not getting along*, *volunteers not having a good connection with the instructor*, *volunteers thinking they do not get enough help on the project*, *having a place to meet*, *volunteers thinking the project is different than they expected*, *volunteers finding out they are not “cut out” for this*, *volunteers becoming bored because*

*the project takes too long*, *volunteers thinking they have “been there, done that!”*, and *that the project doesn’t challenge volunteers enough* were not as important. All respondents’ comments were based on their personal experiences with service-learning.

#### *Challenges Identified by Extension Agent Subpanel*

The Extension agent subpanel rated the importance of 21 challenges of conducting service-learning projects through 4-H Youth Development. The mean and standard deviation for each statement are described in Table 3. The statements are prioritized in order of most important to least important by average arithmetic mean scores. The Extension agent subpanel reached consensus on the three challenges ranked as “important.” These statements were *working around everyone’s schedule* ( $M = 1.89$ ,  $SD = 0.78$ ); *funding* ( $M = 1.80$ ,  $SD = 1.03$ ); and *time* ( $M = 1.80$ ,  $SD = 1.03$ ).

Table 3  
*Delphi Study Round Two: Prioritized List of Challenges Identified by Extension Agent Subpanel (N = 10)*

Challenge	<i>M</i>	<i>SD</i>
1. Funding.	1.80	1.03 <sup>a</sup>
2. Time.	1.80	1.03 <sup>a</sup>
3. Working around everyone's schedule.	1.89	0.78 <sup>a</sup>
4. Time away from family and other responsibilities.	2.70	1.64
5. Getting participants and keeping youth involved/motivated until the end of the project.	2.70	1.94
6. Organizing project logistics (location, bad weather alternative, liability, etc.)	3.00	2.26
7. Youth not following through with their responsibilities.	3.30	1.42 <sup>a</sup>
8. Getting support/commitment from adults and the community.	3.50	2.68
9. Working in a youth/adult partnership; letting youth take leadership for the project.	3.70	2.30
10. Doing reflection and getting youth to understand the importance of reflection.	3.80	2.26
11. Getting them to report their accomplishments.	3.80	2.94
12. Working in a team with different people.	4.00	2.78
13. Doing follow-up projects.	4.70	2.63
14. Thinking our small part would not make a difference.	4.80	2.78
15. Selecting the best project.	5.00	2.62
16. Lack of recognition, media coverage.	5.50	2.51
17. Helping others without embarrassing them or hurting their feelings.	5.67	2.92
18. Not knowing what to do.	5.70	2.67
19. Getting too emotionally involved with the agency or individual being helped.	5.80	3.01
20. That service-learning takes too long and/or is too difficult.	6.10	2.88
21. Peer pressure.	6.11	2.57

*Note.* Likert scale: 1 – 2.49 = Important; 2.5 – 4.99 = Slightly Important; 5 – 7.49 = Slightly Unimportant;  $\geq 7.5$  = Unimportant.

<sup>a</sup> Consensus of Group.

The main purpose of round three is to obtain consensus among panel members and to provide an opportunity for panel members to disagree with the ranking of any statements. Therefore, in round three, three Extension agent subpanel members indicated disagreement with the ranking of two statements. Panel members thought challenges of *funding* and *doing follow-up projects* should have been ranked higher in importance because these two areas posed more of a challenge for them. All respondents' comments were based on their personal experiences with service-learning.

### Conclusions/Recommendations/ Implications

The three subpanels generated several statements with similar content. These challenges included *working around everyone's schedule*, *lack of funding*, *not having enough time*, and *missing other activities and time away from family and friends*. Also, the subpanels generated several statements related to the challenge of planning or logistics and selecting the best project.

Although the subpanels generated many of the same challenges, there were differences among the subpanels' lists and prioritization of challenges. For instance, the 4-H youth and Extension agent subpanels had similar views on the challenge of *not having enough time*; however, the volunteer subpanel did not reach consensus on this challenge. In addition, the youth and volunteer subpanels expressed similar views on the challenge of *getting participants and keeping them motivated and dedicated*, whereas the Extension agent subpanel did not reach consensus on this challenge. Furthermore, the volunteer and Extension agent subpanels, but not the 4-H youth subpanel, reached consensus on the challenge of *funding*.

The 4-H youth subpanel generated one challenge that the other subpanels did not. This statement was *equipment—getting, storing, setting up for project*. The volunteer subpanel had nine statements that were unique from the challenges generated by the other subpanels. These statements included

*knowing how to measure the success of the project/program*, *getting the group to "buy in" and understand the project goals and objectives*, and *volunteers thinking they do not get enough help on their project*. The Extension agent subpanel had eight statements that were not generated by the other subpanels. Some of these statements were *doing follow-up projects, helping others without embarrassing them or hurting their feelings*, *that service-learning takes too long and/or is too difficult*, and *peer pressure*.

The field of service-learning lacks research on challenges of service-learning, particularly as it relates to community-based efforts. This study added to the body of research knowledge by discovering different challenges. Many of the challenges identified in this study—particularly those related to planning time, coordination with the community, lack of leverage on the part of the youth, time, and funding—are congruent with those revealed in studies by Shumer (1997), Wade (1997), and Ogden (2002). However, this study discovered several diverse challenges of community-based service-learning as it relates to 4-H Youth Development. These challenges included *finding enough volunteer leaders*, *being able to find other organizations to help*, *working around everyone's schedule*, and *transportation*. One may conclude that these challenges were identified because of the organization through which the service-learning occurred. As a statewide organization, 4-H engages youth in rural, urban, and suburban areas. Many of the study participants lived in rural parts of the state and, thus, had different challenges than would 4-H members and leaders living in more urban areas. In addition, 4-H is a community-based organization that relies heavily on volunteer leaders to facilitate programming with youth during the after-school hours. Although some challenges of service-learning may be similar in both school-based and community-based efforts, participants in a community-based organization such as 4-H may place more importance on certain challenges than do school-based participants.

Based on the results of this study, recommendations can be made for the

statewide 4-H Youth Development program in Tennessee. As 4-H Youth Development sustains and expands the existing service-learning initiative, efforts should be made to plan for challenges that could hinder the effectiveness of service-learning projects. State 4-H Youth Development staff should provide training, resources, and technical assistance for regional and county Extension staff, volunteers, and 4-H youth who are facing challenges such as coordinating schedules, recruiting volunteers, keeping up participants' motivation and dedication, funding projects, and filling out paperwork for the projects. Resources should include printed and Web-based manuals for planning effective service-learning projects. Resources should also include a compilation of "best practices" from 4-H groups that have overcome service-learning challenges. Specific examples could be rural 4-H groups that organized a project to involve many young people without undue transportation needs, a 4-H club in an inner-city school that found ways to serve despite the members' limited resources, and a group with strong youth leaders who sought community funding for projects. In addition, the state 4-H staff should provide 4-H groups with information on available service-learning grants from external sources and also seek funding to continue the 4-H Seeds of Service mini-grants. These grants should enhance the service-learning efforts at the local and regional level and require the minimal amount of paperwork.

Several questions have surfaced as a result of this study. Researchers should examine the effect that certain factors may have on the challenges of service-learning:

1. What impact does location (i.e., rural, urban, limited resource) have on the challenges of service-learning?
2. How does the availability of grant funding, including grant requirements, affect the challenges of service-learning?
3. To what extent does the degree of youth leadership in a project affect the challenges of service-learning?

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