



U.S. Department of the Interior Service-Learning Toolkit

Fall 2013, Updated Spring 2014



Introduction

Service-learning¹ “is a teaching and learning strategy that integrates community service with instruction and reflection to enrich the learning experience, introduce possible careers, teach civic responsibility, and strengthen communities”². As discussed here, the service-learning methodology is an effective means of engaging youth in a meaningful way with lasting impact. The Department of the Interior (DOI) encourages using place-based service-learning to instill an appreciation and sense of stewardship for America’s public lands in American youth. This publication serves to introduce the concept of service-learning to DOI educators, interpreters, youth program managers, and volunteer coordinators; explain the key elements of quality programming; and provide relevant examples of how DOI already successfully uses service-learning.

After becoming familiar with the service-learning methodology, interested DOI staff and volunteers can explore the breadth of knowledge captured in the numerous toolkits and handbooks on the subject—many of which are listed in the appendices of this publication.

This publication presents the purpose and application of service-learning. Sections include:

I.	Overview: What is Service-Learning.....	2
II.	Impact: The Benefits of Service-Learning.....	5
III.	Methodology: Core Components and Quality Standards....	7
IV.	Service-Learning in Action.....	11
V.	Steps for Action.....	11

Appendices:

A.	An In-Depth Look at Reflection.....	12
B.	The National Youth Leadership Council’s K-12 Service-Learning Standards for Quality Practice.....	13
C.	Rubric for Continuous Improvement.....	15
D.	An In-Depth Look at Youth Voice	17
E.	Case Studies from the Department of the Interior.....	18
	• Phytoplankton Monitoring Program (BLM)	
	• Young Stewards & Leaders (NPS)	
	• Connecting 4-H Youth & Wildlife Refuges Using GIS (FWS)	
	• Engaging Students in Stewardship through Filmmaking (NPS)	
F.	Resource Guide with Site Links.....	26
G.	Bibliography.....	28

¹ The hyphen in service-learning reflects the close connection between ‘service’ and ‘learning’ in the service-learning process.

² Vanderbilt University, “What is Service Learning or Community Engagement?” Accessed April 7, 2014. <http://cft.vanderbilt.edu/guides-sub-pages/teaching-through-community-engagement/>.

[Innovations in Civic Participation](#) (ICP) prepared this publication under contract for the U.S. Department of the Interior’s Office of Youth, Partnerships, and Service. ICP is a nonprofit organization based in Washington, D.C. that supports the development of innovative, high-quality youth civic engagement policies and programs.

I. Overview of Service-Learning

What is service-learning? Although there are multiple definitions for service-learning, the concept remains the same. Service-learning has been defined as “a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich learning, teach civic skills and knowledge, and strengthen communities.”³ The National Youth Leadership Council defines service-learning as a “multi-faceted learning and teaching process” whereby service projects are embedded with

Intentional learning goals and designed to meet real community needs.⁴ While the precise wording varies, experts agree on the core components and quality standards of service-learning programming.

As we begin, it is important to distinguish service-learning from community service—two concepts which are often confused—in order to gain a better understanding of service-learning and its unique effectiveness.

Key Concepts	Core Components	Example
Community Service	Episodic, short-term or long-term projects that support the community. Service is key; educational goals or purposeful reflection are not among the primary objectives.	Students took a field trip to a local river where they planted 125 deer grass seedlings as part of a conservation initiative.
Service-Learning	Sustained projects that are intentional about both educational and community involvement goals.	Students on staff-escorted field trips investigated the plants, animals, and geology of public lands near their community. During the field trips, they collected and pressed plant samples; photographed plants, animals and animal habitats; and documented the area’s geologic and paleontological features. After returning to their schools, the students continued working with specialists to create interpretive materials from their samples and photographs. They mounted items in Plexiglas “flip” panels and included original text about each plant specimen and photograph. Ultimately, these interpretive displays helped to educate visitors to local recreation areas.

³ Ibid.

⁴ National Youth Leadership Council. *“What Makes it Work?”* Accessed February 13, 2013. <http://www.nylc.org/sites/nylc.org/files/wisl/index.html#mainNavLinks=2>.

Service-Learning: One Option among Many at DOI

While this toolkit focuses on service-learning, it is important to note that DOI uses other strategies to engage youth and adults on public lands and waters. One such strategy is place-based learning, “an educational approach that uses all aspects of the local environment, including local cultural, historical and political situations and the natural and built environment, as the integrating context for learning.”⁵ These strategies are not mutually exclusive, however, and DOI strives to integrate these approaches—such as through place-based service-learning—to achieve its goals. Figure 1 presents a graphic showing how place-based learning, civic engagement, and community service come together in place-based service-learning.

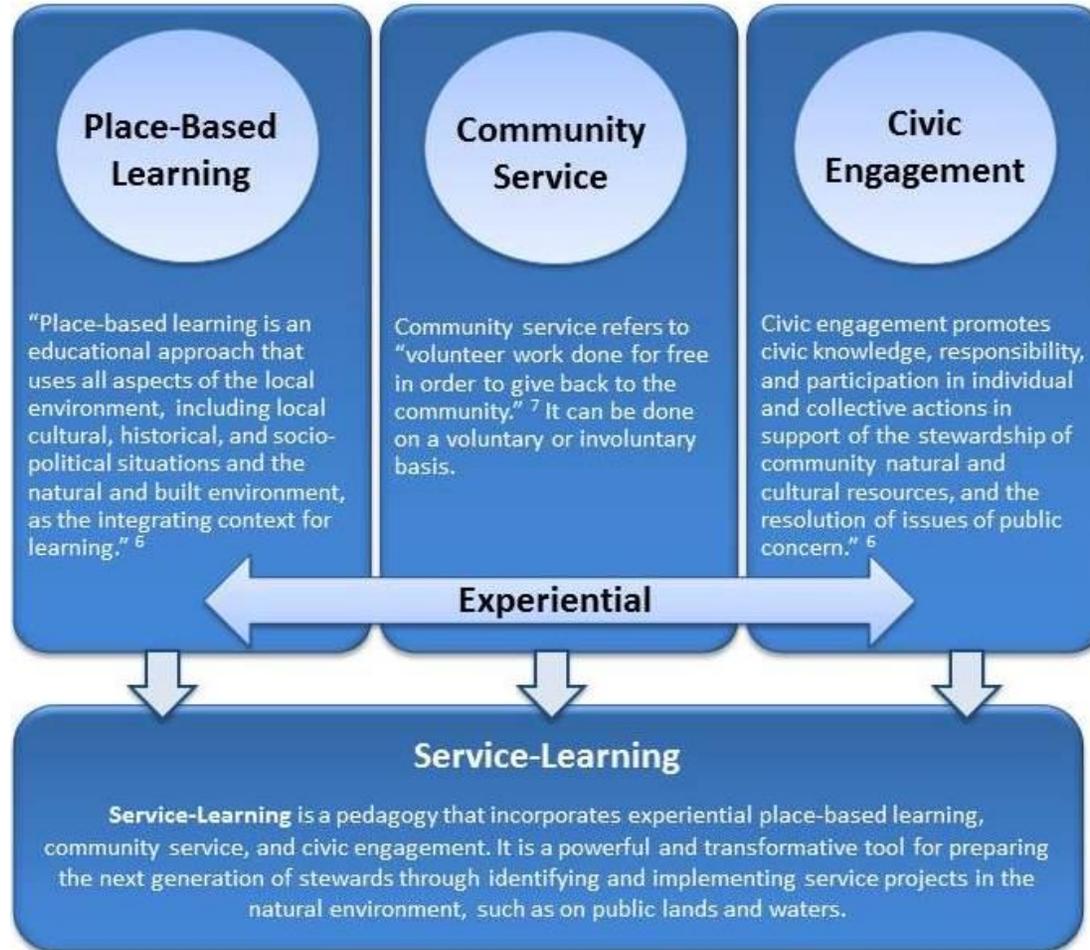
Service-learning projects connect service to broader academic subjects and facilitate reflection about the experience.



⁵ Clark, D. (2008). [Learning to Make Choices for the Future—Connecting Public Lands, Schools, and Communities through Place-based Learning and Civic Engagement](http://www.nps.gov/civic/resources/learning%20to%20Make%20Choices.pdf). Prepared by The Center for Place-based Learning and Community Engagement and A Forest For Every Classroom. Accessed February 13, 2013. <http://www.nps.gov/civic/resources/learning%20to%20Make%20Choices.pdf>.

Figure 1. Service-Learning.

Service-Learning is a *pedagogy* that incorporates experiential place-based learning, community service, and civic engagement⁶⁷



⁶ ibid

⁷ Your Dictionary (Community Service Definition). Accessed February 13, 2013. <http://www.yourdictionary.com/community-service>.

II. Impact: The Benefits of Service-Learning

Service-learning programming provides hands-on, experiential opportunities for young people to connect with real-world problems. Through its service-learning programs, DOI engages youth in the nation's public lands and waters, enabling them to learn complex concepts in living laboratories while simultaneously giving them an appreciation for DOI's stewardship of natural resources and cultural heritage. This section explores the benefits of service-learning and place-based service-learning in relation to DOI's mission.

Connecting Youth to Nature

As new technologies capture the attention of today's youth, research shows that young people are feeling increasingly alienated from the natural world. In the short-term, this trend—referred to as nature deficit disorder—affects youth development. In the long term, this alienation could have negative implications for the state of the nation's outdoor areas and public lands. Service-learning presents an effective and compelling strategy for engaging youth in the outdoors. By engaging young people in service-learning projects in national parks, wildlife refuges, at historic and cultural sites, and in other public lands, DOI staff and volunteers can impart a greater appreciation of the value of nature and the outdoors to young people⁸.

Diversity in STEM (Science, Technology, Engineering, and Mathematics)

DOI needs a scientifically literate public and STEM-skilled workforce to serve its science and stewardship mission. Unfortunately, certain

⁸ Cramer, J.R., "Reviving the Connection between Children and Nature through service-learning restoration partnerships," *Native Plants Journal*, 9(2008). 278-286.

populations—primarily Hispanic or Latino Americans, African Americans, Native Americans and Alaska Natives, women, and persons with disabilities⁹—are underrepresented in STEM fields of study and are also more likely underperform in STEM related fields during high school¹⁰. Research on service-learning indicates that it can play a role in fostering academic achievement^{11,12}. Additionally, service-learning can help to keep at-risk youth in school, engaged in STEM fields. Studies show that service-learning combats drop-out rates by mitigating many of the common reasons why youth drop out from school, including a lack of connection to and investment in the school and community, and a sense of boredom or dissatisfaction with the learning process.¹³ Service-learning also helps youth to develop 'resilience,' protective factors that allow

⁹ National Science Foundation "Higher Education in Science and Engineering." Accessed February 13, 2013.

<http://www.nsf.gov/statistics/seind10/c2/c2s2.htm>

¹⁰ Annie E. Casey Foundation. "Kids Count Data Book: State Trends in Child Well Being." Accessed February 13, 2013.

<http://www.aecf.org/KnowledgeCenter/~media/Pubs/Initiatives/KIDS%20COUNT/123/2012KIDSCOUNTDataBook/KIDSCOUNT2012DataBookFullReport.pdf>.

¹¹ Scales, P.C., et al., "Reducing Academic Achievement Gaps: The role of Community Service and Service-Learning." Accessed April 7, 2014.

http://www.iowaservicelearning.org/uploads/5/9/7/3/5973129/reducing_achievement_gaps.pdf.

¹² Center for Participation and Citizenship at Indiana University, Bloomington. "Standardized Test Scores Improve with Service-Learning." Accessed February 13, 2013.

<http://www.ri.net/middletown/mef/linksresources/documents/ServiceLearningBetterScores.pdf>.

them to persist in times of adversity, thereby helping them to stay in school and engaged in STEM fields.^{14,15}

Despite these benefits, however, disadvantaged youth are less likely to have the opportunity to participate in community service programs. Only 43% of disadvantaged youth volunteer compared to 59% of other youth. Similarly, only 29% of high-poverty schools offered service-learning opportunities in 2004 compared to 36% of other schools.¹⁶

By including middle and high school students in service-learning activities, DOI can thus encourage youth—especially disadvantaged youth—to stay in school and pursue STEM education. This will inspire today’s youth to understand the value and role of science and science inquiry, especially as it relates to the stewardship of America’s natural resources and cultural heritage.

More information about DOI’s 5-year STEM education and employment pathways strategic plan is found at <http://nctc.fws.gov/programs/education-outreach/DOI-STEM-Strategic-Plan-2013-2018.pdf>.

¹³ RMC Research Corporation. “*Impacts of Service-Learning on Participating K-12 Students*.” Accessed April 7, 2014. http://www.servicelearningtexas.org/images/uploads/Impacts_of_SL_on_Participating_K-12_Students_FS_Short_Final_Mar08-1.pdf.

¹⁴ Bridgeland, J.M., Dilulio, Jr., J.J., and Morison, K.B. *The silent epidemic: Perspectives of high school dropouts*, (Washington, DC: Civic Enterprises, 2006).

¹⁵ Bridgeland, J.M., Dilulio, Jr., J.J., and Wulsin, S.C. *Engaged for success: Service-learning as a tool for high school dropout prevention*, (Washington, DC: Civic Enterprises, 2008).

Career Exploration

Service-learning can help to inform and prepare students for career opportunities, especially those in STEM fields. In turn, this can lead to a generation of professionals who have a deeper appreciation of and commitment to the DOI’s work.

According to researcher Dr. Shelley Billig, students who participate in service-learning projects gain more career skills, communication skills, and knowledge of careers, as compared to non-participants. Students who engage in service-learning activities also develop positive work orientation attitudes and workplace literacy skills such as punctuality, following directions, and ability to work with others. Additionally, students acquire specific knowledge about careers directly related to the service they perform.¹⁷ Many of DOI’s service-learning programs have enabled participants to explore careers. For instance, youth participating in the Parkway Youth Volunteers program in Blue Ridge Parkway, North Carolina learned about careers in the National Park Service. Similarly, middle and high school students from the Klallam language tribes in Washington who participated in the Elwha Science Education Project in Olympic National Park benefited from career exposure¹⁸.

*Archaeologist
Biologist
Community Planning
Interpretation
Natural Resource
Management
Historic Preservation*

¹⁶ Ibid.

¹⁷ Billig, S. “*Research on K-12 School Based Service-Learning: The Evidence Builds*,” *Phi Delta Kappan* (2000): 658-664.

¹⁸ These youth also showed higher graduation rates and an increased assessment of the importance of geosciences. The project will continue through grants secured by The Lower Elwha Klallam Tribe and NatureBridge.

III. Methodology: Core Components and Quality Standards

Now that you have a basic understanding of what service-learning is, its potential benefits to DOI, and its relation to other DOI strategies, it is time to take in-depth look at the components of a

service-learning project and what distinguishes certain service-learning projects as high quality. Figure 2 presents the five stages of service-learning.

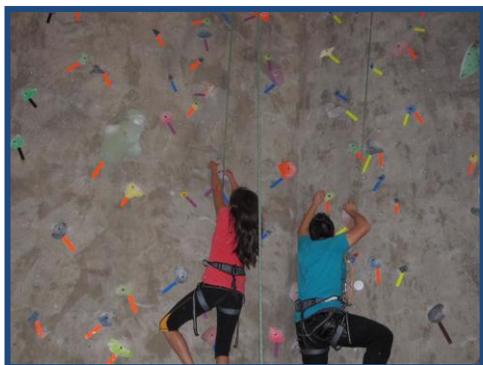
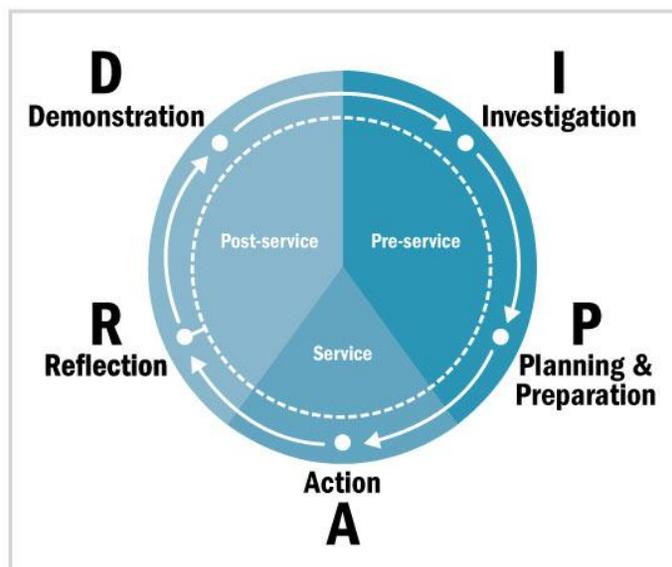


Figure 2. Service-Learning IPARD Cycle¹⁹



Evaluations are an essential part of effective program management and growth. Effective evaluation is not an “event” that occurs at the end of a project, but is an ongoing process throughout.

¹⁹ National Youth Leadership Council, “The IPARD Framework.” Accessed April 7, 2014. <http://gsn-newdemo2.s3.amazonaws.com/documents/1165/original/IPARD.pdf?1394831499>.

The five stages of service-learning are frequently presented as IPARD (Investigate, Plan, Act, Reflect, Demonstrate). The IPARD cycle is step 3 in the 4-step process for service-learning project development. Here are the steps.

- Step 1: Identify Desired Results: What do you want the youth to learn by the end of the unit or process? This could relate to environmental or other content standards or skills, such as leadership or other 21st century skills.
- Step 2: Determine Acceptable Evidence: How will you know as the educator when your participants have learned or mastered the content or skills you are seeking? What will they do to prove this to you?
- Step 3: Plan Learning Experiences (IPARD Implementation). Guide the activities related to the project where youth take ownership of the process.
- Step 4: Self Reflection. Reflect on the process. What went well? What needs to be updated to improve the process.

Here's a more in-depth look at IPARD.

Investigate: Service-Learning Stage 1

This initial phase of service-learning involves a knowledge-building process in which participants research and investigate community strengths and challenges to become familiar with multiple issues that impact young people, their schools, and their communities. Drawing on this research, participants and adult leaders can then identify an area of need in which they will focus their efforts throughout the subsequent stages of the service-learning process. One such method of investigation is Community Mapping. Community mapping is the process by which people, places,

associations, and organizations are identified in a way that both highlights community resources and illuminates the challenges facing the community. Community mapping can include survey and interview activities, as well as traditional research. Mapping can also incorporate multimedia tools, such as digital photography or video.

A rule in planning service projects is for young people to identify issues they care about. That being said, it is important to note that adults play critical roles in facilitating this process, as they can bring issues to the attention of young people that they may not have considered otherwise.

Plan: Service-Learning Stage 2

Once participants have completed their community mapping and issue identification, it is time for them to plan how they will address a particular community challenge. In the *Semester of Service Strategy Guide*, Youth Service America explains there are three types of service:

Direct: Firsthand service that provides students with personal connections to individuals and causes. Examples include:

- Working with environmental groups on climate change
- Portraying living history at a National Historical Park

Indirect: Emphasizes organizational assistance and strategic operation. Examples include:

- Acting as stewards for a national monument
- Leading workshops to educate people on environmental issues

Advocacy: Focuses on writing and communication skills for public awareness. Examples include:

- Designing an information campaign for a national or global issue
- Creating a public service announcement that advertises solutions to a community issue
- Conducting a survey and presenting findings to local officials

The type of service conducted will depend on the issue area identified, available time and resources, and the skills, talents, and interests of the youth participants. One way to narrow down potential service projects is to facilitate a collaborative process that encourages participants to consider their options and the desirability of each proposal before choosing how to address the community issue selected.

Act: Service-Learning Stage 3

After careful planning, it is time for action. Young people should be well aware of the logistics, roles, and responsibilities associated with the service project. Gathering data – through the use of photography, video, and observational notes – during the implementation of the project, and the process leading up to this point, will help later with participant reflection.

Reflect: Service-Learning Stage 4

The service-learning process includes multiple opportunities for reflection before, during, and after the project. Reflection can take many forms, including journaling, group discussion, video production, and poster presentations. See Appendix A for further explanation and examples of how to implement this important stage of the service-learning process.

Demonstrate: Service-Learning Stage 5

A service-learning process is not complete without an event or other occasion that brings closure to the experience. During this stage, youth should have the opportunity to share what they have learned and accomplished. Youth should also be recognized for individual and group contributions.

Quality Standards

Not all service-learning projects are high-quality, especially at first. It takes time, practice, and a commitment to continuous improvement to reach this level. The National Youth Leadership Council has developed a useful tool for practitioners to help guide them through this process (see Figure 3). It is important to note that not all components have to reach the “advanced” level defined in the rubric. All programs can strive for the highest quality programming for the components that best align with their goals. A full version of the K-12 Service-Learning Standards for Quality Practice is in Appendix B; see Appendix C for a rubric detailing the evolution of service-learning projects.



Figure 3. K-12 Service-Learning Standards for Quality Practice

1. **Meaningful Service:** Service-learning actively engages participants in meaningful and personally relevant service activities.
2. **Link to Learning Goals:** Service-learning is intentionally used as an instructional strategy to meet learning goals and/or content standards.
3. **Reflection:** Service-learning incorporates opportunities for recurrent and timely reflection about the participants and their connection to society.
4. **Diversity:** Service-learning promotes understanding of diversity and mutual respect among all participants.
5. **Youth Voice:** Service-learning provides youth with a strong voice in planning, implementing and evaluating service-learning experiences with guidance from adults.
6. **Partnerships:** Service-learning partnerships are collaborative, mutually beneficial, and address community needs.
7. **Progress Monitoring:** Service-learning participants continuously assess the quality of implementation and progress towards specified goals and use results for improvement and sustainability purposes.
8. **Duration and Intensity:** Service-learning has sufficient duration and intensity to address community needs and meet specific outcomes.

Reflection, a unique and critical component of high-quality programming, is described by Learn and Service America as an opportunity to provide “students and teachers with a way to look back at their experiences, evaluate them and apply what is learned to future experiences with new experiences to develop critical thinking and problem solving skills.” An in-depth look at Reflection can be found in Appendix A.

Youth led does not equate to ‘adult hands-off’. There are important roles that adults play in facilitating youth leadership opportunities. Adults set the tone for youth responsibility by acting as facilitators, support staff and consultant-type “experts” when needed. An in-depth analysis of Youth Voice can be found in Appendix D.

IV. Service-Learning in Action

Service-learning is not new to DOI. In fact, some bureaus have a history of implementing service-learning projects. Below are brief descriptions of some of the place-based service-learning projects implemented by DOI bureaus (see Appendix E for detailed case studies of these and other DOI programs).

Phytoplankton Monitoring Program: The King Range National Conservation Area (NCA) has been monitoring Pacific Ocean phytoplankton along the Lost Coast with the help of a South Fork High School Marine Biology class for several years. Twice a month throughout the school year, students collect phytoplankton samples from Shelter Cove, CA, and use microscopes to identify various species of phytoplankton and recognize which ones could be harmful to wildlife and humans. *BLM King Range National Conservation Area, California*

Young Stewards & Leaders: Currently in its pilot phase, the Youth Stewards & Leaders program will ask participants for a one-year commitment to the program, which involves interactive monthly meetings, volunteering with different community organizations, and leadership workshops through Teton Science Schools. Participants will help to expand a conservation focused speaker series and develop a conservation focused project. *Grand Teton National Park/NPS/DOI*

Connecting 4-H Youth & Wildlife Refuges: This program connects students—who may otherwise choose to spend time with technology—with the outdoors. The GIS mapping project engages 4-H youth as citizen scientists who conduct relevant research and collect data that will have an impact for both the Fish and Wildlife Service and the 4-H'ers. The program benefits the Fish and Wildlife Service by providing data for habitat protection, conservation, restoration and other uses. *Tamarac National Wildlife Refuge (FWS/NWR)*

Engaging Students in Stewardship through Filmmaking: This community-building project connects middle school students to the American Civil War through service-learning, park stewardship, and technology. In this youth-

led project, students create vodcasts, or mini-movies, about their local history, and drive every step of the process. Students research, write scripts, act, film, and edit to create a final product for their peers.

V. Steps for Action

Service-learning is a valuable tool that can build students' skills, stewardship ethics, knowledge of DOI bureaus, and can also make a difference in the community. You have now received basic information on how to develop service-learning programs or restructure programs to include service-learning. What are the next steps towards implementing these projects?

1. Consult additional resources
 - a. See Appendices, including Appendix F for a resource guide with site links and Appendix G for a bibliography
 - b. Become familiar with community resources (organizations, schools, demographics)
 - c. Connect with program contacts in the attached case studies to learn more about planning and implementing service-learning programs.
2. Prepare
 - a. Identify a partner
 - b. Work with partner to identify a group with whom to work
 - c. Work with the group and the partner to identify an area that the youth would like to strengthen, improve, or change
 - d. Work with partnering organization and group to develop curriculum (see program overviews for examples)

Appendix A: An In-Depth Look at Reflection

Reflection is a unique and critical component of high-quality programming, providing an essential intentionality and thoughtfulness that elevates the service-learning experience. The following briefly explores this important stage of the service-learning process and provides examples of how to integrate it into programming.

Ongoing Reflection

Example: One service-learning program posed questions to participants at the beginning of each day in order to prepare them for upcoming activities. During a project on homelessness, for example, youth were asked: What would you do if you were homeless and had no food to eat? Where could you go for help? The program asked additional questions of the youth at the conclusion of the day, such as: What did you like most about the day? What could have gone better? What did this experience teach you about being a leader? These quick, free-write exercises did not necessarily require deep critical thinking, but offered a way to frame an issue and gather immediate feedback on a project.

Reflecting on Multiple Levels and Identity Exploration through the Arts

Example: Participants are asked to reflect on multiple levels: self, group (participants), and community (local, national and global). This is exemplified in the activist Batey Urbano program in Chicago, where participants begin by telling personal stories that are then woven into collaborative projects that involve spoken word, hip-hop, painting, and dance. A study of Batey Urbano demonstrated that when youth come together to share their personal narratives, they discover common threads that lead to social action.

Multiple Formats for Reflection

Example: Some service-learning programs capture their service experiences on video and use the footage in multimedia reflections. Additional formats for reflection include essays, poetry, rap songs, photography, and group discussions.

In-Depth Analyses

Example: The K-12 Service-Learning Standards published by the National Youth Leadership Council recommends that reflective activities move beyond simplistic summaries of the day's events to something more substantive and analytical. For more about creating meaningful reflection, see <http://gsn.nylc.org/clearinghouse> and use "reflection" in the keyword search box.



Appendix B: The National Youth Leadership Council's K-12 Service-Learning Standards for Quality Practice

- 1. Meaningful Service.** Service-learning actively engages participants in meaningful and personally relevant service activities.
 - a. Service-learning experiences are appropriate to participant ages and developmental abilities.
 - b. Service-learning addresses issues that are personally relevant to the participants.
 - c. Service-learning provides participants with interesting and engaging service activities.
 - d. Service-learning encourages participants to understand their service experiences in the context of the underlying societal issues being addressed.
 - e. Service-learning leads to attainable and visible outcomes that are valued by those being served.
 - 2. Link to Learning Goals.** Service-learning is intentionally used as an instructional strategy to meet learning goals and/or content standards.
 - a. Service-learning has clearly articulated learning goals.
 - b. Service-learning is aligned with the academic and/or programmatic curriculum.
 - c. Service-learning helps participants learn how to transfer knowledge and skills from one setting to another.
 - d. Service-learning that takes place in schools is formally recognized in school board policies and student records.
 - 3. Reflection.** Service-learning incorporates opportunities for recurrent and timely reflection about the participants and their connection to society.
 - a. Service-learning reflection includes a variety of verbal, written, artistic and nonverbal activities to demonstrate understanding and changes in participants' knowledge, skills and/or attitudes.
 - 4. Diversity.** Service-learning promotes understanding of diversity and mutual respect among all participants.
 - a. Service-learning helps participants identify and analyze different points of view to gain understanding of multiple perspectives.
 - b. Service-learning helps participants develop interpersonal skills in conflict resolution and groups decision-making.
 - c. Service-learning helps participants actively seek to understand and value the diverse backgrounds and perspectives of those offering and receiving service.
 - d. Service-learning encourages participants to recognize and overcome stereotypes.
- b. Service-learning reflection occurs before, during and after the service experience.
 - c. Service-learning reflection prompts participants to think deeply about complex community problems and alternative solutions.
 - d. Service-learning reflection encourages participants to examine the preconceptions and assumptions to explore and understand their roles and responsibilities as citizens.
 - e. Service-learning reflection encourages participants to examine a variety of social and civic issues related to their service-learning experiences so that participants understand connections to public policy and civic life.

5. **Youth Voice.** Service-learning provides youth with a strong voice in planning, implementing and evaluating service-learning experiences with guidance from adults.
 - a. Service-learning engages youth in generating ideas during the planning, implementation and evaluation processes.
 - b. Service-learning involves youth and adults in creating an environment that supports trust and open expression of ideas.
 - c. Service-learning promotes acquisition of knowledge and skills to enhance youth leadership and decision-making.
 - d. Service-learning involves youth in evaluating the quality and effectiveness of the service-learning experience.
6. **Partnerships.** Service-learning partnerships are collaborative, mutually beneficial and address community needs.
 - a. Service-learning involves a variety of partners, including youth, educators, families, community members, community-based organizations and/or businesses.
 - b. Service-learning partnerships are characterized by frequent and regular communication to keep all partners well-informed about activities and progress.
 - c. Service-learning partners collaborate to establish a shared vision and set common goals to address community needs.
 - d. Service-learning partners collaboratively develop and implement action plans to meet specified goals.
 - e. Service-learning partners share knowledge and understanding of school and community assets and needs, and view each other as valued resources.
7. **Progress Monitoring.** Service-learning engages participants in an ongoing process to assess the quality of implementation and progress toward meeting specified goals, and uses results for improvement and sustainability.
 - a. Service-learning participants collect evidence of progress toward meeting specific service goals and learning outcomes from multiple sources throughout the service-learning experience.
 - b. Service-learning participants collect evidence of the quality of service-learning implementation from multiple sources throughout the service-learning experience.
 - c. Service-learning participants use evidence to improve service-learning experiences.
 - d. Service-learning participants communicate evidence of progress toward goals and outcomes with the broader community, including policy-makers and education leaders, to deepen service-learning understanding and ensure that high quality practices are sustained.
8. **Duration and Intensity.** Service-learning has sufficient duration and intensity to address community needs and meet specific outcomes.
 - a. Service-learning experiences include the process of investigating community needs, preparing for service, action, reflection demonstration of learning and impacts, and celebration.
 - b. Service-learning is conducted during concentrated blocks of time across a period of several weeks or months
 - c. Service-learning experiences provide enough time to address identified community needs and achieve learning outcomes.

Appendix C: Rubric for Continuous Improvement²⁰



Rubric for Continuous Improvement of the Service-Learning Experience¹

	Novice	Introductory	Experienced	Advanced
Duration and Intensity <i>Service-learning has sufficient duration and intensity to address community needs and meet specified outcomes.</i>	Project is brief (less than two weeks) and addresses an immediate need without providing a long term solution. Process of investigation, planning, action, reflection, and demonstration/celebration of impacts is weak. Minimal amount of time and intensity is provided.	The Service-Learning experience is carried out over a short time period (a few weeks), addresses an immediate need and provides only a start to a long term solution. The process of investigating community needs, planning, action, reflection, and demonstration/celebration drives the project somewhat, resulting in limited time and intensity.	The process of investigating community needs, planning, action, reflection, and demonstration/celebration is used on a limited basis. Service-Learning is conducted over a significant period of time. The project addresses community need but falls short of achieving all learning outcomes.	The process of investigating community needs, planning, action, reflection, and demonstration/celebration of learning and impacts on self and community is used consistently. Service-learning is conducted during concentrated blocks of time across a period of several weeks or months, providing adequate time to address identified community needs and achieve learning outcomes.
Link to Curriculum <i>Service-learning is intentionally used as an instructional strategy to meet learning goals and/or content standards.</i>	Project uses skills which can be found in the standards, but they aren't the foundation out of which the project grows. Skills incorporated into the experience are at lower levels on the hierarchy of learning. Service is not intentionally connected to learning and is seen as mainly an add-on or enrichment activity.	Students master basic skills through the service-learning project but the link to curriculum is weak and not intentional. Experience does not align with content standards and is not used to push learning to higher levels of application. Student is recognized on school records, but no formal district policy is in place.	Project work leads students toward mastery of more complex skills in a rigorous and relevant curriculum. Instruction assists students in completion of project, though the link may not be direct and intentional. Service-learning is an integral part of the academic expectations for students throughout the district.	Participants learn how to transfer knowledge and skills from one setting to another. Service-learning is explicitly aligned with the academic curriculum; learning goals are clearly articulated. Students construct knowledge through challenging tasks in a rigorous and relevant curriculum. Service-learning is formally recognized in school board policies and student records.
Partnerships <i>Service-learning partnerships are collaborative, mutually beneficial, and address community needs.</i>	Project is determined and implemented with little involvement from community partners or is grounded in meeting a need for service presented by the community partner or school. A shared vision and collaborative partnership has not been established or maintained.	Partnerships are few in number, weak, or non-existent. Limited interactions with community partners lead to meeting a minimal community need. Project reflects a partial shared vision with minimal collaborative work between the partners. Service is not reciprocal or of mutual benefit.	Some communication and ongoing interaction with community partners is central to the project. Students work with partners to develop common goals. More opportunities could be provided to encourage students to see community members as collaborative partners and resources, and not just recipients of service.	A variety of partners are engaged. Partnerships engage in frequent and regular communication, establish a shared vision and set common goals, and collaboratively develop and implement action plans to meet specified goals. Partners share knowledge and understanding of school and community assets and needs, and view each other as valued resources.
Meaningful Service <i>Service-learning actively engages participants in meaningful and personally relevant service activities.</i>	Students provide indirect service with no contact with population being served. Project is determined without a community needs assessment and does not lead to attainable and visible outcomes. Experience is not appropriate for students' age and developmental level and/or issue is not personally relevant.	Community needs assessment is done in isolation from the community. Project includes minimal direct contact with those being served. Outcomes are attainable and visible, but do little to contribute toward lasting change. Students do not understand their service experiences in the context of the underlying societal issues being addressed.	Project addresses a real need connected to a personally relevant issue and provides direct contact with those being served. Outcomes are attainable and visible, but may not be highly valued by those being served in the school, local, and/or global community.	Experiences are developmentally appropriate, address personally relevant issues, and encourage participants to understand their service experiences in the context of the underlying societal issues being addressed. Interesting and engaging service activities lead to attainable and visible outcomes that have significant impact on participants and others in the school, local, and/or global community.

¹ Based on the *K-12 Service-Learning Standards for Quality Practice*. National Youth Leadership Council, 2008.

²⁰ Used with permission by Teri Dary, Co-Chair, National Coalition for Academic Service-Learning



Rubric for Continuous Improvement of the Service-Learning Experience²

	Novice	Introductory	Experienced	Advanced
Youth Voice <i>Service-learning provides youth with a strong voice in planning, implementing, and evaluating service-learning experiences with guidance from adults.</i>	Teacher determines project with very limited or without student input. Task completion is determined and monitored by the teacher. Teacher evaluates quality and effectiveness of the service-learning experience without student input.	Teacher determines project and offers strong guidance in organizing and completing project tasks. Students are allowed to provide input into decisions, but final determination is made by the teacher. Youth have limited opportunities to demonstrate their abilities and decision-making skills.	Teacher works with students in determining project based on standards. All students work collaboratively to develop project plan and take leadership in carrying out tasks. Teacher helps to shape decisions throughout the process, but places primary emphasis on student voice.	Youth are engaged in generating ideas, identifying learning outcomes, and decision-making during planning, implementation, and evaluation. Youth acquire knowledge and skills to enhance leadership and decision-making and are involved in evaluating the quality and effectiveness of the service-learning experience. Youth and adults are involved in creating an environment that supports trust and open expression of ideas.
Diversity <i>Service-learning promotes understanding of diversity and mutual respect among all participants.</i>	Students' pre-conceptions and stereotypes are not challenged. Multiple perspectives are not intentionally sought or incorporated into service-learning experience. Decisions are made by vote rather than consensus.	Understanding of multiple perspectives is limited to tolerance and acceptance of others. Students' pre-conceptions are challenged on a limited basis but project could do more to address engaging the perspective of recipients of the service (people and/or places).	Some time is spent identifying and overcoming stereotypes and valuing different points of view. Students' pre-conceptions and stereotypes are somewhat challenged. Some collaboration incorporating multiple perspectives is developed.	Participants analyze different points of view to gain understanding of multiple perspectives, develop interpersonal skills in conflict resolution and decision-making, recognize and overcome stereotypes, and understand and value the diverse backgrounds and perspectives of those offering and receiving service. Decisions are made through a consensus process.
Reflection <i>Service-learning incorporates multiple challenging reflection activities that are ongoing and that prompt deep thinking and analysis about oneself and one's relationship to society.</i>	Basic reflection is provided for at the end of the service-learning experience using one or two different methods. Reflection is limited in its depth and does not demonstrate complex analysis of social and civic issues. Examination of preconceptions and assumptions is not incorporated into reflective process.	Reflection consists of documenting progress of project and has no clear connection to skills being developed. Project could do more to deepen the level of reflection for students and challenge them to identify, research, and discuss alternative solutions.	Meaningful reflection is planned and integral to the project and is used to teach and/or reinforce core academic skills and/or content. Reflection includes some emphasis on higher order thinking skills. Students are prepared for service-related tasks in connection with skill instruction. Project challenges students to identify, research and implement alternative solutions.	Participants think deeply about complex community problems and alternative solutions and examine a variety of social and civic issues. Participants examine preconceptions in understanding their roles and responsibilities as citizens. It occurs before, during, and after the experience and includes a variety of verbal, written, artistic, and nonverbal activities to demonstrate changes in participants' knowledge, skills, and/or attitudes.
Progress Monitoring <i>Service-learning engages participants in an ongoing process to assess the quality of implementation and progress toward meeting specified goals, and uses results for improvement and sustainability.</i>	Teacher and students follow implementation plans without collecting data to guide decisions. No clear connection exists to specific goals and learning outcomes.	Teacher assesses outcome of learning activities separate from service-learning experience. Teacher and students gather evidence of progress, but do not base decisions on data collected.	Evidence collected provides a picture of student progress throughout the service-learning experience and guides both instruction and project implementation.	Evidence of quality service-learning implementation and progress toward meeting specific goals and learning outcomes is collected from multiple sources throughout. Evidence is used to improve experiences and progress toward goals. Evidence of progress is communicated with the broader community to deepen understanding of service-learning and ensure high quality practices.

² Based on the *K-12 Service-Learning Standards for Quality Practice*. National Youth Leadership Council, 2008.

Appendix D: An In-Depth Look at Youth Voice

High-quality service-learning programming provides youth with the opportunity to assume leadership roles. In this vein, service-learning providers should create an atmosphere where youth and adults work in partnership, sharing responsibilities for the management and implementation of the program. Strategies include formal and informal youth leadership roles, training, and multiple opportunities to practice communication and organizational skills. Adults set the tone for youth responsibility by acting as facilitators, support staff, and consultant-type “experts” when needed.

Over the past two decades, there has been an explosion in youth leadership research, practitioner guides, and training materials for schools, nonprofit organizations, and public agencies. Increasingly, adults are open to the idea that young people should be involved and assume positions of power in relation to the policies and practices that affect their lives. However, while this new level of acceptance represents a good step forward, many organizations struggle with moving this ideal into practice. Quality service-learning programming recognizes that “youth-led” does not equal “adult hands off,” and that there are important roles that adults play in facilitating developmentally appropriate youth leadership opportunities. That being said, a high-quality youth leadership agenda requires multiple opportunities for young people to be involved in planning, management, implementation, and evaluation of the service-learning program.

There are several different ways to establish productive youth-adult partnerships with varying degrees of autonomy and control for youth participants. Youth activist scholar and professor, Ben Kirshner, describes three distinct types of youth-adult partnerships observed in out-of-school time civic engagement programming:

- **Facilitation.** Youth take the lead on all tasks by selecting and implementing projects with limited adult assistance. Adults are “neutral” observers providing minimal facilitative support only.
- **Apprenticeship.** Adults serve as coaches providing intensive skills training, modeling behaviors, and filling in background knowledge that provides a context for youth service work. Young people assume leadership roles in planning and implementing service projects with some guidance from adults.
- **Joint Work.** Adults and youth work side-by-side on service projects they plan and implement collaboratively. There are not clear boundaries between youth and adult roles.

It is important to strike a balance between adults stepping in and stepping back, and each of the above styles of partnership have an appropriate place. Along these lines, Kirshner explains that employing only *facilitation* and *joint work* styles misses out on the opportunity to teach young people valuable skills and contextual knowledge that will help them become more effective in their service work. The *apprenticeship* approach to youth-adult partnerships provides this missing component, combining both skill-building and youth leadership opportunities.

Appendix E: Case Studies from the Department of the Interior

Phytoplankton Monitoring Program (BLM)	
Location: Bureau of Land Management King Range National Conservation Area, California	Program Contact: Rachel Sowards, rsowards@blm.gov
<p>Program Description</p> <p>The King Range National Conservation Area has been monitoring Pacific Ocean phytoplankton along the Lost Coast with the help of a South Fork High School Marine Biology class for several years. Twice a month throughout the school year, students collect phytoplankton samples from Shelter Cove, California, and use microscopes to identify various species of phytoplankton and recognize which ones could be harmful to wildlife and humans.</p> <p style="text-align: right;">Students send their findings to the California Department of Public Health’s Marine Biotoxin Monitoring Program and the National Oceanic and Atmospheric Administration’s (NOAA) Phytoplankton Monitoring Program to be included in a statewide and nationwide databank. If a harmful algal bloom is discovered, the California Department of Public Health posts warning notices throughout the coastal region.</p>	
<p>Program Development</p> <p>King Range National Conservation Area became involved in NOAA’s Phytoplankton Monitoring Network in spring 2008. King Range National Conservation Area became aware of this partnership opportunity when information about NOAA was provided to the <i>Hands on the Land</i> network of field classrooms (www.handsontheland.org), of which they are a member.</p> <p style="text-align: right;">BLM staff subsequently attended two trainings provided by NOAA and the California Department of Public Health. Bureau of Land Management staff developed the Phytoplankton Monitoring Program with local teachers and non-profit organizations during summer 2008.</p>	
<p>Roles and Responsibilities:</p> <ul style="list-style-type: none"> • <i>Bureau of Land Management Arcata California Field Office:</i> Manage land where data is collected; lead field trips to data collection site. • <i>South Fork High School:</i> Students from Marine Biology class collect phytoplankton samples from Pacific Ocean in Shelter Cove along the Lost Coast twice a month throughout the school year. • <i>California Department of Public Health’s Marine Biotoxin Monitoring Program:</i> Manage statewide data bank on marine biotoxins to which students contribute their data; publish warnings on harmful algal blooms. • <i>NOAA’s Phytoplankton Monitoring Program:</i> Manage national data bank on marine biotoxins. 	

<p>Target Audience</p> <p>The current target audience is local high school students. In previous years, the program involved Lost Coast Lifelab (an after school program at Whitethorn School) and Mattole Elementary School.</p>	<p>Budget</p> <p>The King Range National Conservation Area received a phytoplankton net, refractometer, thermometer, and PC microscope on loan from NOAA’s Phytoplankton Monitoring Network, plus funds from the Bureau of Land Management’s <i>Hands on the Land</i> and Youth Incentive Funding. The program used these funds to purchase supplies as well as cover fieldtrip transportation and microscope repair costs. Bureau of Land Management staff time is paid through the annual King Range National Conservation Area budget.</p>
<p>Desired Outcomes</p> <ul style="list-style-type: none"> • Students gain experience via hands-on scientific research and contribute to scientific data collection that pertains directly to state education standards • Students learn how to use microscopes to identify species of phytoplankton • Students learn to recognize which species could potentially be harmful to wildlife and humans • Student research benefits the public by helping to keep people safe from harmful algal blooms 	<p>Program Evaluation</p> <p>Each year, Bureau of Land Management staff and the South Fork High School Marine Biology teacher review the program and assess programmatic strengths and weaknesses. The staff noted that returning student participants—such as students who participated in the Lost Coast Lifelab after school program years ago, and are now in the high school Marine Biology class—enhance the program by informally mentoring their peers.</p>
<p>Mission</p> <p>By participating in the Phytoplankton Monitoring Program, students develop an understanding of harmful algal blooms and of their stewardship role in protecting ocean resources.</p> <p>The program simultaneously benefits the Bureau of Land Management by bringing greater awareness of the value of protecting ocean resources, such as those included in the California Coastal National Monument.</p>	<p>Promising Practices & Next Steps</p> <p>Best practices include having several people trained in phytoplankton sampling techniques so that the responsibility for collecting sample doesn’t fall on one or two people (particularly when school is not in session). The Bureau of Land Management hopes to expand the program by involving community members from Shelter Cove as part of the California Coastal National Monument’s Lost Coast Gateway initiative.</p>

Connecting 4-H Youth & Wildlife Refuges using GPS/GIS at Tamarac National Wildlife Refuge (FWS/NWR)

Location: Tamarac National Wildlife Refuge, Minnesota

Program Contact: Kelly Blackledge, kelly_blackledge@fws.gov

Program Description

This program connects students—who may otherwise choose to spend time indoors with technology—with the outdoors. The GIS mapping project engages 4-H youth as citizen scientists who conduct relevant research and collect data that will have an impact for both the Fish and Wildlife Service (FWS) and the 4-H members.

As part of a larger, multi-state pilot project, the FWS Tamarac National Wildlife Refuge (NWR) partnered with a 4-H team led by a University of Minnesota Extension Educator for 4-H Youth Development. The youth

provided mapping, photography, and condition status for assets throughout the refuge. Refuge staff had identified these as GIS mapping needs, as they were determining sign additions and replacements. The youth learned how to use iPads as GPS tools, and they input data and photographs into a GIS mapping program. Adult 4-H leaders and mentors provided on-site guidance while 4-H youth collected data. The team brought a range of partners to the project including 4-H, University of Minnesota, community colleges, tribal groups, and the FWS staff at Tamarac.

Program Development

FWS partnered with 4-H National Headquarters at USDA's National Institute of Food and Agriculture to support a pilot project to connect 4-H GIS teams with nearby refuges, fish hatcheries, or ecological services offices where 4-H members addressed sites' GIS mapping needs. Beginning in 2011, Iowa State University Extension Service, Engineering and Technology (E-SET) has served as the principle investigator to implement and test the program model. Hands-on projects began in states with experienced 4-H GIS mapping teams and where Cooperative Extension had relationships with nearby refuges (Iowa, Kansas, Minnesota, New York). The project expanded (Pennsylvania, Virginia) to further build capacity and reach underserved audiences. Initial sites provided mentoring to the new sites.

This case study focuses on Tamarac NWR. Projects varied based on sites' needs. In Iowa, for example, the 4-H team partnered with Neal Smith NWR to map locations of remnant bur oak and shagbark hickory trees invaded by exotic non-fire tolerant trees in the refuge oak savanna habitat. The youth learned to use GPS on mobile units and GIS mapping as they identified the locations of as many relevant species as possible. These maps provided essential information for refuge staff, enabling them to prescribe necessary maintenance, such as removing dead or diseased trees as well as non-native trees. In partnership with university staff, the youth explored new technologies and tested data collection methods including using 'smart' phones to stream data from the field to the GIS server on campus 100 miles away.

Roles and Responsibilities:

- 4-H: Iowa State University manages the multi-state pilot project, oversees a process evaluation, and leads the development of a guide to replicate the project at other FWS sites or public lands. University of Minnesota Extension staff and adult volunteers facilitated project implementation in Minnesota.
- 4-H youth: Conducted research; completed and presented GIS mapping project; and presented their projects at national and regional 4-H and wildlife management professional conferences.
- FWS, Tamarac NWR: Assisted with design of training for mentors and students, provided a welcoming atmosphere and site to conduct research, introduced youth to career opportunities at FWS, and assisted interns in ground truthing the data collected by youth.
- White Earth Tribal and Community College: Provided interns and mentors for the 4-H youth; assisted with on-site guidance for youth.

<p>Target Audience Youth targeted for participation include youth already involved in 4-H on the reservation, and both experienced and new 4-H youth interested in GIS and GPS. Participants for the Tamarac NWR site were American Indian youth in the middle schools of the White Earth Nation.</p>	<p>Budget FY2011-FY2012 funding (multi-state project): \$60,500 Funding amounts by category: \$24,000 Personnel (program management and evaluation) \$15,000 Equipment \$20,000 Travel (project evaluation site visits, travel for youth to present at professional conferences, local transportation) \$1,500 Communications, materials, other direct costs</p>
<p>Desired Outcomes</p> <ul style="list-style-type: none"> • Youth gain skills in technology, particularly by using mobile apps for real research • Youth develop confidence and leadership skills as they train other adults and youth in the technology • Youth develop presentation and negotiation skills as the work with FWS sites to identify projects that are mutually beneficial and within skill range of the youth • Youth gain an awareness of resources and stewardship opportunities in the community • Youth learn about potential careers in science and technology and required education for various jobs at refuges • Youth present their projects at three national conferences to share experiences with other potential partners • FWS sites obtain useful geospatial data that aids in decision making, research, improved public awareness and value 	<p>Program Evaluation Iowa State University is finalizing the process evaluation and has developed an evaluation tool that includes a youth survey that assesses gain in knowledge and skill gain, attitudinal change and career aspiration using items from the Youth, Engagement, Attitudes and Knowledge evaluation tool and focus group questions to use in replication projects. Partners, staff, interns and students involved in the projects were interviewed about their participation.</p> <p>Early findings indicate 4-H members demonstrated deep knowledge of the skills and technology they learned through the project, evidenced by their presentations at national conferences. Further, the program benefited FWS by providing data for habitat protection, conservation, restoration, and other uses. It benefitted 4-H youth by affording them opportunities to serve on public lands and develop skills that could lead them to pursue degrees and careers in fields such as wildlife biology, natural resource management, community planning, recreation, or agriculture. The youth's gain of outdoors skills at Tamarac NWR, resulted in a GIS project layered with a nature photography experience.</p>
<p>Mission</p> <ul style="list-style-type: none"> • Connect people to nature and provide opportunities for youth to engage in science careers. • Provide increasingly prevalent and necessary GIS capabilities to organizations in natural resource management. 	<p>Promising Practices & Next Steps A 4-H community of youth and adult GIS program participants collaborate and support each other via a listserv and conference calls—within both the 4-H/FWS GIS projects and within the larger 4-H GIS community. They also engage online (via eXtension) and serve as resources to GPS and GIS programs and activities. While GIS mapping can be complex, by identifying management tasks that benefit both partners (4-H and FWS), youth add value to the partnerships. A negotiation tool to allow potential partners to successfully identify projects that are appropriate and meaningful for all involved is available at www.extension.iastate.edu/4hfiles/gps-gisprojectchecklist.pdf. The pilot program model can be replicated in other sites, and it can be strengthened when pilot project sites mentor 4-H professionals and volunteers in the new sites.</p>

Engaging Students in Stewardship through Filmmaking (NPS)

Location: Harpers Ferry National Historical Park and other sites within the Journey Through Hallowed Ground National Heritage Area

Program Contacts: Autumn Cook, Harpers Ferry National Historical Park, autumn_cook@nps.gov; Jessie Aucoin, JTHG jessie@jthg.org

Program Description

This community-building project connects middle school students to the American Civil War through service-learning, park stewardship, and technology. In this youth-led project, students create vodcasts, or mini-movies, about their local history, and drive every step of the process. Students research, write scripts, act, film, and edit to create a final product for their peers. They are introduced to primary source

documents, humanities scholarship, acting, music/sound creation, and professional film editing software to put the story of National Parks in their own words. The vodcasts have become part of the official interpretive materials of the National Park Service and are available to educators, students, and visitors worldwide through the internet.

Program Development

In 2009, Journey Through Hallowed Ground, Harpers Ferry Middle School, and Harpers Ferry National Historical Park collaborated to create a pilot version of the project. This innovative, student-generated project filled a critical need for inclusive interpretation and engaged youth by incorporating digital technology and sound humanities scholarship to make the story of John Brown and his raiders as relevant today as it was in 1859. The Journey Through Hallowed Ground has continued to partner with schools near

Thomas Jefferson's Monticello, Manassas National Battlefield Park, Ball's Bluff Regional Park, Antietam National Battlefield, C&O Canal National Historical Park, Gettysburg National Military Park, Fredericksburg & Spotsylvania National Military Park to develop projects that the schools and National Park Service can manage independently thereon. Since 2009, Harpers Ferry National Historical Park has sustained the project, with over 500 Harpers Ferry Middle School students participating to create 29 mini-movies; an additional 2,000 students have participated at other sites.

Roles and Responsibilities:

- *Students:* Participate in an immersion in the national park, self-select roles, research and write scripts, create costumes and props, direct, act, and film in a historical setting, and edit footage.
- *School:* Determine schedule for student activities; encourage teachers to incorporate service-learning programming into their instructional schedule; provide substitute teachers on days when school faculty are needed for agreed-upon project activities; work with students as they craft their scripts and produce their videos.
- *Journey Through Hallowed Ground:* Set schedule and establish

action steps for team members; lead student sessions to include introductory session, focus groups, costuming workshops and filming/editing days; identify instructional goals for service-learning project; lead students in the classroom and on site as they develop scripts, film and edit movies.

- *National Park:* Assist with research; provide primary source documents; lead on-site immersion program for students; assist with costuming workshops and filming and editing days; screen for authenticity in costuming and props; review scripts for historical accuracy. Note: In the Harpers Ferry National Historical Park model, the park carries out the roles of both Journey Through Hallowed Ground and National Park as listed above.

<p>Target Audience</p> <p>The target audience is middle school students and their teachers. The target audience is reached by sharing the lesson plans and/or students' work through participating parks' websites, parks' and Journey Through Hallowed Ground YouTube channels and key partners' websites, including EDSITEment.neh.gov; History.com; and chnm.gmu.edu. Local cable channels premiered the entire vodcast series on their <i>On Demand</i> platform in the summer of 2012.</p>	<p>Budget</p> <p>The startup costs for each site's pilot program are covered by major grants the Journey Through Hallowed Ground secures; NPS and partnering schools are responsible for securing all necessary funds thereafter. The startup budget for Harpers Ferry National Historical Park, including computers, software, video cameras, and historic clothing, was approximately \$6,000. The yearly budget for Harpers Ferry National Historical Park to include costume materials, a contract with a local filmmaker, and equipment updates, is approximately \$4,000. This budget does not include the cost of staff time, which equates to approximately .5 FTE. Note: This project can be accomplished with a variety of budgets and time-constraints.</p>
<p>Desired Outcomes</p> <ul style="list-style-type: none"> • Make the American Civil War relevant to a national and diverse youth audience • Facilitate exploration and relevance for local students by bringing history alive with lessons of leadership and civic involvement • Engage young people through the use of technology • Enhance community relationships and park stewardship 	<p>Program Evaluation</p> <p>Park staff receive feedback from students and teachers regarding their experiences and program recommendations at the conclusion of each project. Further, park staff have observed these outcomes:</p> <ul style="list-style-type: none"> • Harpers Ferry Middle School continues to see repeat student involvement and increasing history and civics test scores. • Many student participants have become volunteers or employees at Harpers Ferry National Historical Park. • The Harpers Ferry vodcasts have over 12,000 views on YouTube.
<p>Mission</p> <p>Engage youth in the mission of the National Park Service through preserving America's heritage and understanding its relevance and importance to their lives by connecting them to the history in their backyard. Allow local students to take ownership of their community's story by using technology to share it with their peers throughout the nation.</p>	<p>Promising Practices & Next Steps</p> <p><i>Of the Student, By the Student, For the Student</i>[®] aims to establish projects in other parks throughout the Journey Through Hallowed Ground National Heritage Area and to create a framework to replicate this model nationwide.</p> <p>Harpers Ferry National Historical Park and Harpers Ferry Middle School are committed to telling the park's Civil War story through 2015, following which students will create vodcasts for the National Park Service's Centennial. The Harpers Ferry model has been presented at conferences and picked up by other sites and organizations. See www.youtube.com/HAFEducation and http://www.hallowedground.org/Education/Of-the-Student-By-the-Student-For-the-Student-Service-Learning-Projects.</p>

Young Stewards & Leaders (NPS)	
Location: Grand Teton National Park, Wyoming	Program Contact: Megan Kohli, megan_kohli@nps.gov
<p>Program Description</p> <p>Young Stewards & Leaders is an innovative, multicultural program that engages six to eight students from Jackson Wyoming high schools. Developed in collaboration with Grand Teton National Park Foundation and Teton Science schools, this pilot program promotes youth empowerment, leadership development, volunteerism, and conservation stewardship. Participants make a 1-year commitment during which they attend monthly interactive meetings, volunteer with different community organizations and take leadership workshops through Teton Science Schools. Participants become ambassadors for stewardship within Grand</p>	<p>Teton National Park, surrounding public lands, and the local community through the development of a conservation-focused speaker series and a conservation-focused project.</p> <p>This program helps to foster conservation, raise awareness of the unique and valuable resources in the park and the local community, and create a stepping stone to careers in the National Park Service or in other conservation-driven careers. Qualified graduating high school seniors of the program will have an opportunity to be a part of Grand Teton National Park Service Academy.</p>
<p>Program Development</p> <p>Young Stewards & Leaders was inspired by two existing National Park Service programs: Inspiring Young Emerging Leaders at Golden Gate National Park Conservancy and Youth Leadership</p>	<p>Academy at Little Rock Central High School National Historic Site.</p>
<p>Roles and Responsibilities:</p> <ul style="list-style-type: none"> • <i>Grand Teton National Park:</i> Develop program curriculum and content; serve as program facilitator. • <i>Teton Science Schools:</i> Provide support in program facilitation; work in collaboration with the Grand Teton National Park to develop leadership workshops. • <i>Student participants:</i> Organize and facilitate meetings, choose environmental issue, conduct research, and complete and present an environmental project. • <i>Grand Teton National Park Foundation:</i> Provide financial support. 	

<p>Target Audience</p> <p>The target audience is local high school students. The program attracts participants by visiting local high schools and reaching out to other Grand Teton National Park program alumni.</p>	<p>Budget</p> <p>This program is funded through the National Park Foundation’s America’s Best Idea grant program (\$12,000) and the Grand Teton National Park Foundation (\$1,370).</p>
<p>Desired Outcomes</p> <ul style="list-style-type: none"> • Students gain leadership, public speaking, organizational and basic budget skills • Students gain self-awareness of their strengths and weaknesses • Students gain an awareness of resources in the community • Students gain a sense of community among their cohort • Grand Teton National Park and partners support individuals’ development of a stewardship ethic for Grand Teton National Park, surrounding public lands, and community resources. Also, partners and Grand Teton National Park develops a more diverse visitor base to Grand Teton National Park. 	<p>Program Evaluation</p> <p>The evaluation plan calls for two levels of evaluation:</p> <ol style="list-style-type: none"> 1. An open-ended questionnaire conducted by the Grand Teton National Park to assist with program development. 2. Monthly-program check-ins during monthly meetings to ensure students and the project are making progress toward the outcomes.
<p>Mission</p> <p>The Young Stewards & Leaders program aims to engage the local community by raising awareness of environmental issues chosen by students by exposing students to Grand Teton National Park and surrounding assets and resources in the local gateway community.</p>	<p>Promising Practices & Next Steps</p> <p>It is best to provide greater structure to students while continuing to ensure that the program is student-led.</p> <p>In the future, the Young Stewards & Leaders program would like to invite program participants to return to the program during their high school years to serve as mentors for new program participants.</p>

Appendix F: Resource Guide with Site Links

America's Great Outdoors:

<http://www.doi.gov/americasgreatoutdoors/index.cfm>

The America's Great Outdoors (AGO) Initiative is an effort by President Obama to develop a 21st century conservation and recreation agenda. AGO brings together many federal agencies to work together with state and local partners across the country.

Campus Compact: www.compact.org

Campus Compact is a national coalition of nearly 1,200 college and university presidents who are dedicated to integrating public and community service into higher education. This website features models of successful service-learning and civic engagement programs, as well as service statistics.

The Corps Network: www.nascc.org

The Corps Network is a national membership association of service and conservation corps, which are themselves comprehensive youth development programs. The Corps Network has resources available to non-members, including publications and manuals about Corps.

Earth Force: www.earthforce.org

Earth Force trains and supports educators as they engage young people in environmental issues. The website lists a plethora of environmental resources.

Innovations in Civic Participation: www.icicp.org

Innovations in Civic Participation supports the development of innovative, high-quality youth civic engagement policies and programs both in the United States and around the world. ICP worked under contract with DOI to develop this toolkit.

Journey Through Hallowed Ground Partnership:

www.hallowedground.org

The Journey Through Hallowed Ground Partnership is a four-state nonprofit dedicated to raising awareness of the American heritage, from Pennsylvania to Virginia to West Virginia to Maryland.

Lift: www.lift.nylc.org

This multi-media websites offers in-depth learning about the K-12 Service Learning Standards for Quality Practice through videos and downloadable resources, such as project examples, tip sheets, and research briefs. Lift: Raising the Bar for Service-Learning Practice was developed by the National Youth Leadership Council and the Center for Global Environmental Education at Hamline University.

National Service-Learning Clearinghouse and the Generator School Network (GSN®): <http://gsn.nylc.org/clearinghouse>

GSN is the National Youth Leadership Council's (NYLC) online resource for service-learning professional development and networking. GSN supports a community of educators committed to using service-learning. *Learn* houses free resources, including recorded versions of monthly webinars. *Plan* offers 500+ user-generated service-learning projects. *Connect* provides a forum for creating groups and discussions. NYLC acquired National Service-Learning Clearinghouse resources in 2013 and opened *Learn* and Clearinghouse sections to visitors without signing in. The Clearinghouse offers thousands of free online resources for K-12, higher education, community-based organizations, and tribal communities.

- See also, the *GSN Self-Assessment Rubric* at <http://gsn.nylc.org/topics/31/documents/1167>.

National Youth Leadership Council: www.nylc.org

The National Youth Leadership Council (NYLC) has been a resource for service-learning practitioners for more than 30 years. NYLC partners with schools and organizations and serves practitioners working to guide students towards academic success through NYLC's professional development offerings, National Service-Learning Conference, publications, and resources.

Ohio Historic Preservation Corps:

www.ohiocivilwar150.org/resources/ameriCorps/ohio-historic-preservation-corps

Ohio Historic Preservation Corps is an AmeriCorps program with the Ohio Historical Society. Much of its attention is currently focused on commemorating the Civil War. Its online resources include information on exhibits and artifacts, teaching toolkits, and biographies of involved Corps members.

Teaching with Historic Places:

<http://www.nps.gov/nr/twhp/about.htm>

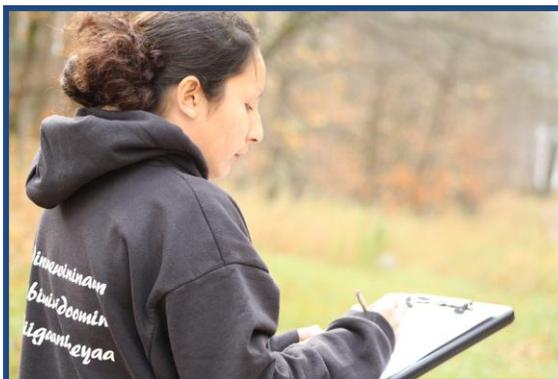
Teaching with Historic Places is a program of the National Park Service’s Heritage Education Services. Its website offers guidance to teachers on how to bring their lesson plans to life by incorporating properties listed in the NPS’ National Register of Historic Places.

Utah Conservation Corps: www.usu.edu/ucc

The Utah Conservation Corps (UCC) is Utah's statewide Conservation Corps, the largest environmental AmeriCorps program in Utah. Information is available on its website on how to partner with UCC in a national community service program.

Youth Service America: www.ysa.org

Youth Service America (YSA) oversees mobilization campaigns, issues more than \$1 million in grants annually, and provides resources and trainings to support high-quality, high-impact service and service-learning projects. Resources on the YSA website include a service strategy guide, service project toolkit, and tip sheets.



Appendix G: Bibliography

- Anderson, L et al, *"The Effects of City Year Over Time,"* (Washington, DC: Policy Studies Associates, 2007).
- Annie E. Casey Foundation. *"Kids Count Data Book: State Trends in Child Well Being."* Accessed February 13, 2013. <http://www.aecf.org/KnowledgeCenter/~media/Pubs/Initiatives/KIDS%20COUNT/123/2012KIDSCOUNTDataBook/KIDSCOUNT2012DataBookFullReport.pdf>.
- Astin, A., Vogelgesang, L. and Yee, L. *"How Service-Learning Affects Students."* *Higher Education Research Institute* (2000): 69.
- Billig, S. "Research on K-12 School Based Service-Learning: The Evidence Builds," *Phi Delta Kappan* (2000): 658-664.
- Bridgeland, J., Dilulio, J. and Morison, K. *"The Silent Epidemic: Perspectives of High School Dropouts,"* (Washington, DC: Civic Enterprises, 2006).
- Bridgeland, J., Dilulio, J., and Wulsin, S. "Engaged for Success: Service-learning as a Tool for High School Dropout Prevention." (Washington, DC: Civic Enterprises, 2008).
- Center for Participation and Citizenship at Indiana University, Bloomington. *"Standardized Test Scores Improve with Service-Learning."* Accessed February 13, 2013. <http://www.ri.net/middletown/mef/linksresources/documents/ServiceLearningBetterScores.pdf>.
- Clark, D. *"Learning to Make Choices for the Future—Connecting Public Lands, Schools, and Communities through Place-based Learning and Civic Engagement."* Prepared by The Center for Place-based Learning and Community Engagement and A Forest For Every Classroom. Accessed February 13, 2013. <http://www.nps.gov/civic/resources/learning%20to%20Make%20Choices.pdf>.
- Cramer, J.R. "Reviving the Connection Between Children and Nature through service-learning restoration partnerships." *Native Plants Journal*, 9(2008), 278-286.
- Flores-Gonzalez, N. *"Immigrants, Citizens or Both?: The Second Generation in the Immigrant Rights Marches."* Marcha: Latino Chicago and the Immigrant Rights Movement. (Urbana, IL: University of Illinois Press, 2010).
- Kirkham, M. *"Sustaining Service-Learning in Wisconsin."* (Madison: Wisconsin Department of Public Instruction, 2001).
- Kirshner, B. "Guided Participation in Three Youth Activism Organizations: Facilitation, Apprenticeship, and Joint Work." *Journal of the Learning Sciences*, 17(2008), 74.
- Koenig, E. *"Generator Go Green (G3) Initiative."* (St. Paul: National Youth Leadership Council, 2008).
- Louv, R. *"Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder."* (New York: Algonquin Books, 2005).
- Mt. Sanford Tribal Consortium. *"Our Programs."* Accessed February 13, 2013. <http://www.mstc.org/programs.html>
- National Science Foundation. "Higher Education in Science and Engineering" in *Science and Engineering Indicators 2010*. Accessed February 13, 2013. <http://www.nsf.gov/statistics/seind10/c2/c2s2.htm>.

National Youth Leadership Council, "The IPARD Framework." Accessed April 7, 2014. <http://gsn-newdemo2.s3.amazonaws.com/documents/1165/original/IPARD.pdf?1394831499>.

National Youth Leadership Council. "What Makes it Work?" Accessed February 13, 2013. <http://www.nylc.org/sites/nylc.org/files/wisl/index.html#mainNavLinks=2>

National Youth Leadership Council. "K-12 Service-Learning Standards for Quality Practice." Accessed January 29, 2013. http://www.nylc.org/sites/nylc.org/files/files/Standards_Oct2009-web.pdf

RMC Research Corporation, *K-12 Service-Learning Project Planning Toolkit*, (Scotts Valley, CA: National Service-Learning Clearinghouse, 2006/2009).

RMC Research Corporation. "Impacts of Service-Learning on Participating K-12 Students." Accessed April 7, 2014. http://www.servicelearningtexas.org/images/uploads/Impacts_of_SL_on_Participating_K-12_Students_FS_Short_Final_Mar08-1.pdf.

RMC Research Corporation. *Standards and Indicators for Effective Service-Learning Practice*, (Washington, DC: ETR Associates, 2008).

Scales, P.C., Roehlkepartain, E.C., Neal, M., Kielsmeier, J.C., and Benson, P.L. "Reducing Academic Achievement Gaps: The role of Community Service and Service-Learning." Accessed April 7, 2014. http://www.iowaservicelearning.org/uploads/5/9/7/3/5973129/reducing_achievement_gaps.pdf.

Service, Commission on National and Community. "What You Can Do for Your Country." (Washington, DC: GPO, 1993).

Spring, K., Grimm, R., and Dietz N. "Growing to Greatness: Community Service and Service-Learning in America's Schools." (St. Paul, MN: National Youth Leadership Council, 2009).

Vanderbilt University, "What is Service Learning or Community Engagement?" Accessed April 7, 2014. <http://cft.vanderbilt.edu/guides-sub-pages/teaching-through-community-engagement/>.

Your Dictionary (Community Service Definition). Accessed February 13, 2013. <http://www.yourdictionary.com/community-service>.

