An Evaluation of
A Trail to Every Classroom
Summer Institute
2006

Prepared for:
Appalachian Trail Conservancy
Appalachian Trail Park Office of the National Park Service

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September 22, 2006
Special thanks to the individual teachers, community partners, and institute facilitators who so graciously participated in this evaluation.

NOTE:
This report was authored by PEER Associates, Inc. A more complete description of the evaluation personnel involved in this project can be found in the Appendices of this report or at www.PEECworks.org. Evaluation Co-Directors for PEER Associates Amy Powers and Michael Duffin can be contacted at amy@PEERassociates.net or michael@PEERassociates.net.
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EXECUTIVE SUMMARY

The Trail to Every Classroom (TTEC) project is a collaborative effort between the Appalachian Trail Conservancy, the National Park Service, and the founding partners of the Forest for Every Classroom (FFEC) program in Vermont, which serves as the model for this pilot initiative. These partners seek to promote student understanding of and appreciation for the Appalachian Trail (AT), public lands, and natural and cultural resources as assets within their communities from Georgia to Maine. The TTEC Summer Institute consisted of one week of training in the principles and practices of place-based education and service learning along the AT. TTEC hopes to increase the availability of grants available to schools and build capacity to sustain service-learning activities and partnerships into the future.

Evaluation Methods

The evaluation of the institute was conducted by external evaluators from PEER Associates, Inc. PEER Associates uses a multiple-methods, utilization-focused, participatory evaluation process. The Summer Institute evaluation consisted of two days of observations, 8 focus groups (representing 70% of the participants), and 28 surveys (representing 70% of the participants). All data was systematically analyzed into emergent themes, a summary of which is presented below.

Summary of Key Evaluation Findings

- Overall, the institute was a positive experience for educators and a successful first step in the FFEC replication process.

- The institute provided a networking opportunity that offered a diversity of knowledge, skills, and experiences for educators to draw upon during curriculum planning.

- The institute increased educators’ confidence and preparation to integrate place-based education and service learning activities into their curricula.

- Most educators successfully developed written curriculum or implementation plans for the upcoming school year, though they may have benefitted from more guidance and time in the planning process.

- As a result of the institute, educators began to value the Appalachian Trail more highly as a community asset and educational tool.
- The institute provided a **coherent frame** for theories of place-based education and service learning.

- The institute was delivered in a comfortable, flexible environment with **outstanding facilities**, which helped to create an atmosphere of respect, humor, and shared enthusiasm that was vital to the institute’s success.

**Recommendations & Conclusions**

TTEC program partners should consider offering ongoing professional development in place-based education and service-learning techniques, using FFEC principles as a guideline. Specifically, participants need ongoing support from partner organizations in order to implement larger-scale TTEC projects, including:

- Repeated networking and follow-up opportunities
- Direct outreach to school administrators
- Website and other technical support
- Funding for transportation, materials, and teacher release time.

“This has been twice as good as any other course or in-service experience that I’ve had in the education area!”

- Teacher participant

“Before I came, I thought of [the AT] as a very individual thing. I might go out and hike on it, and I thought of it as for ‘me.’ Now it’s something that I can’t wait to go out and share with the kids, with the community. I want other people to see what a great resource it is.”

- Teacher participant
INTRODUCTION

A Trail to Every Classroom Program Overview

The Trail to Every Classroom (TTEC) project is a collaborative effort between the Appalachian Trail Conservancy (ATC), the National Park Service, and the founding partners of the Forest for Every Classroom (FFEC) program in Vermont, which serves as the model for this pilot initiative. ATC is the lead organization in a unique volunteer-based Cooperative Management System involving more than 100 partner organizations and more than 5,000 volunteers responsible for the management of the Appalachian Trail (AT) from Georgia to Maine. Since 1992, ATC has provided grants to schools and community-based organizations for place-based education and service-learning activities.

The AT is a significant landmark, due not only to its considerable length, but also to its presence as a historical, recreational, and educational resource. Recognizing this valuable resource, ATC seeks to sustain its volunteer base by helping educators to engage youth and build a sense of stewardship for the AT. The TTEC project aims to promote student understanding of and appreciation for the AT, public lands, and natural and cultural resources as assets within their communities, through the provision of ongoing professional development for educators in the principles and practices of place-based education and service-learning. TTEC hopes to increase the availability of grants available to schools and build capacity to sustain service-learning activities and partnerships into the future.

The TTEC program is modeled after the successful Forest for Every Classroom program in northern New England. FFEC was initiated as a professional development program for educators in 2000 by a partnership of public and private partners, including Marsh-Billings-Rockefeller National Historic Park, NPS Conservation Study Institute, Shelburne Farms, National Wildlife Federation, and USDA Forest Service. The FFEC program provides educators with a year-long workshop series in which they are exposed to innovative instructional content, new ways to link subjects to the local community through field experience with resource specialists, and curriculum development support. Critical components of the FFEC model include an emphasis on place-based education, service-learning, educational use of community resources, and civic participation. The FFEC program has demonstrated strong results, including
enhanced development of teacher leaders, measurable improvements in educator practice, creation of support networks, and improved student academic performance and civic engagement. (See www.PEECworks.org for more information on the FFEC program, including detailed program evaluations.)

The TTEC Summer Institute

In July of 2006, TTEC offered a week-long pilot professional development institute as a first effort in the replication of FFEC in the AT region. The institute provided training for educators to become service-learning coordinators in their local schools and communities, following a “train-the-trainer” professional development format. It also sought to provide a networking opportunity for educators to exchange ideas and establish partnerships with ATC staff, state and national park staff, and trail club volunteers. Participants were required to submit final curriculum to receive graduate credit for attending the institute. After the training, ATC also made available grants up to $1000 per school for curriculum that is approved for implementation by school administration.

The TTEC Summer Institute was attended by a total of 40 participants, representing a wide mix of roles. These included primary and secondary school teachers in varying content areas, such as science, language arts, social studies, physical education, art, and special education. In addition, a wide variety of community partners attended the institute, including AT volunteers, members of regional AT clubs, ATC and NPS staff, as well as staff members from educational and conservation nonprofit agencies.

Participants were grouped into regional teams of four to six members, representing a total of eight areas stretching across the entire length of the AT:
- Georgia
- North Carolina
- Virginia
- West Virginia
- Pennsylvania – Boiling Springs
- Pennsylvania – Schuylkill River Region
- New York
- New Hampshire/ Vermont & Maine

While some participants were familiar with other members of their regional team before attending the training, most individuals met and worked together for the first time at the Summer Institute, and participants within a team were not necessarily from the same town, school, or district.
In addition, 17 facilitators and instructors participated in the institute. Instructors hailed from a variety of organizational roles, including:

- National Park Service
- Appalachian Trail Conservancy
- Center for Place-Based Learning and Community Engagement (a project of Marsh Billings Rockefeller National Historic Park, the Conservation Study Institute, and Shelburne Farms)
- University of Utah
- Great Smoky Mountains National Park
- Project Learning Tree
- Corporation for National and Community Service, Learn & Serve
- American Hiking Society
- National Conservation Training Center
- Program Evaluation and Educational Research Associates

Institute sessions covered topics including:

- Overview of the Appalachian Trail, National Heritage Areas, and associated teaching resources
- Place-based education and service-learning as a way to promote academic achievement and community goals
- Mapping of community assets
- Curriculum planning
- Student involvement in project planning
- Assessment and student reflection of place-based and service-learning activities
- Program evaluation and sustainability
- Panel discussions and case studies exploring successful strategies from current community projects
- Networking and resources

An evaluation was conducted of the pilot Summer Institute to help TTEC staff determine how to best meet the ongoing needs of educators involved in their place-based and service-learning initiatives, and to determine next steps in the replication process.

“I’ve seen so many perspectives, people from all over, all looking at the same roadblocks and stumbling blocks. It’s good to see we’re all feeling the same things – the same positive things – from Maine to Georgia, the same across the country.”

- Teacher participant
EVALUATION METHODS

External Evaluation Team
The evaluation was conducted by an external evaluation team, PEER Associates, Inc. PEER Associates is committed to using a multiple-methods, utilization-focused, participatory evaluation process. It is our intention to help organizations better understand their programs and to help them to improve their programs based on evidence of program functioning and outcomes. We also intend to help organizations build their own capacity to reflect on and internally evaluate programs and to help improve the "evaluability" of programs. See Appendix A for a more complete description of the evaluation staff and measures to mitigate the potential for researcher bias.

Throughout the evaluation process, TTEC partners were invited to be active participants in structuring and contributing to the evaluation process in order to increase the likelihood that evaluation processes and products would be both appropriate and useful for all stakeholders.

Evaluation Questions
The evaluation team sought to evaluate the effectiveness of the TTEC Summer Institute in terms of process (program implementation) and outcomes (results). In order to help direct the evaluation process, we asked TTEC program staff to identify the primary stakeholders most likely to be interested in the results of the institute evaluation. TTEC staff identified the National Park Service (NPS), Appalachian Trail Park Office (ATPO), and the Appalachian Trail Conservancy (ATC) as being highly invested in the evaluation. According to TTEC staff, these organizations are shifting toward a focus on the promotion of environmental educational programs that contribute to civic engagement. As a result, the TTEC program has become more interested in designing projects that use civic engagement to promote volunteerism on the AT.

In addition, potential program funders were identified as a primary audience of the evaluation. TTEC staff was interested in determining how to build sustainability into their program. By examining how teachers received the training and planned to implement what they had learned, TTEC partners hoped to map out a plan for ongoing professional development. This evaluation is intended to provide useful information for TTEC project partners and funders to assist with program development, justification, and refinement.

To identify areas of inquiry that would be most useful to the evaluation, we constructed a TTEC program logic model, informed by a review of program documents and

"[I've learned] that if we don't teach people in the community what the trail is, and how valuable it is, how much we stand to lose it. Because people don't value what they don't know, and what they don't understand."

- Teacher participant
conversations with program staff (see Appendix B). In addition to those related to the structure and design of the institute, priority was given to collecting data relevant to the following questions drawn from program logic model:

- Do educators/teams successfully develop written curriculum or implementation plans for the upcoming school year?
- Do educators intend to implement TTEC plans in the upcoming school year?
- Do educators value the Appalachian Trail (AT) as a natural and cultural community resource and educational tool?
- Is educator practice enhanced? Specifically,
  - Does collaboration and communication between trail partners and schools increase?
  - Does educators' sense of efficacy (i.e. confidence and ability to realistically integrate place-based education and service learning activities into curriculum) increase?
- Do educators foresee that place-based education and service-learning curricula will be supported by their school administrators?

### Data Collection

Evaluators attended the final two days of the institute in mid-July of 2006. During this time, we conducted eight focus groups with a total of 28 institute participants, in groups of two to five, representing a total of 70% of the institute participants. Each focus group consisted of participants in a variety of roles, including classroom teachers, AT Conservancy staff, National Park Service staff, AT volunteers, and other education professionals. We also conducted one focus group with four members of the institute program staff. Confidentiality was assured to all participants during the interview process, and only anonymous quotes were used in the reporting process. The focus group interview guide is included in Appendix C.

The evaluation team also conducted observations of the program during the last two days of the institute. These included observations of institute sessions and hands-on activities, regional team curriculum presentations, and a final group sharing at the end of the institute.

A 22-item survey was administered by email to all participants two weeks after the conclusion of the institute. The purpose of the survey was to provide collateral information related to the evaluation areas detailed above. The survey also provided measures of actual and intended TTEC-related educator practices. We collected a total of 28 survey responses, representing 70% of the institute participants. Confidentiality of responses was assured to all participants. Data collection was completed in late August of 2006. See Appendix D for a complete list of the survey instrument questions.
Data Analysis

After the fieldwork was complete, observation data, open-ended survey responses, and transcribed focus group interviews were coded to illuminate key emergent concepts related to the evaluation questions. Once all the data was collected and read through to create a holistic impression of the data set, an initial list of themes was created. Then all of the data were coded according to the theme list, refining the theme list structure using a constant comparative process. Data from additional survey questions were used to provide collateral evidence for emerging themes.

Once the data was organized according to these themes, an outline of the findings was generated in the form of a “Utilization Preview.” This document was used as a basis for verbal presentation of the initial findings of the evaluation to the TTEC program partners, and to revisit the original evaluation rationale, identifying what findings were likely to be of greatest interest to the program stakeholders. This conversation also helped to shape the form and focus of the final report. Evaluators then wrote up a narrative based upon the Utilization Preview outline, pulling in data from documents and transcripts to support the writing as appropriate.
EVALUATION FINDINGS

Five major themes emerged during data analysis. First, the institute was an overall positive training experience for educators and a successful first step in the FFEC replication process. Secondly, the institute provided a networking opportunity that offered a diversity of knowledge, skills, and experiences for educators to draw upon during curriculum planning. Third, the institute increased educators’ confidence and preparation to integrate place-based education and service learning activities into their curricula. Fourth, most educators successfully developed written curriculum or implementation plans for the upcoming school year. Lastly, as a result of the institute, educators began to value the Appalachian Trail more highly as a community asset and educational tool.

We also present two additional themes of note related to the structure and delivery of the institute. In general, the institute provided a coherent frame for theories of place-based education and service learning. The institute was also delivered in a comfortable, flexible environment very suitable and responsive to the needs of adult learners.

Key Emergent Themes

Overall Success of the Institute

“This was a memorable, stimulating, and motivating experience. It was like fireworks in my mind, and I was trying chasing all these sparks in my mind before they burnt out.”
- Teacher participant

Overall, the summer institute was a great success. Participants described positive aspects of the institute in a variety of areas, including the institute design, content, and delivery, skills and knowledge they acquired as a result of the training, opportunities for networking and resource-building, and exposure to new ways of viewing the AT and other public lands. In addition, participants offered suggestions for ways to expand upon the initial success of the week-long institute, including areas in which they might need additional support to implement successful TTEC projects. The following discussion details outcomes in these areas, as they relate to the evaluation questions.

Networking Opportunities

Participants referenced the value of the networking opportunity provided by the institute more than any other theme that emerged from the analysis. The institute allowed educators to meet and work with others from a variety of locations and roles, which provided a diversity of knowledge, skills, and experiences to draw upon during the curriculum planning process. Collaborations were established that are vital to project implementation, and the sharing of resources and increase in communication among educators and community partners was an important part of the process.
Figure 1. Percent of participants who strongly agreed that they were prepared to collaborate with other educators for curriculum planning, comparing before and after the institute.

Many educators reported that they would have liked even more time to interact and network with their fellow institute participants. Some suggested that while working in regional teams provided an excellent and varied source of ideas, a chance to interact more closely with members of other teams would also have been beneficial. Some recommended organizing educators by grade level or content area at various points throughout the week.

Of the community partners who participated in the study, about 84% tended to or strongly agreed that they had gained skills in how to establish and maintain service-learning partnerships with local classroom teachers.

**Educators’ Sense of Efficacy**

The week-long summer institute positively increased educators’ sense of efficacy. This included their confidence, sense of empowerment, and ability to realistically integrate place-based education and service-learning activities into their school curriculum. Figure 2 shows participants’ estimates of their level of preparation for various educator practices, comparing before and after the institute.

"I was just floored. I knew the AT existed and that people tried to hike from one end to the other, but to see the enormous amount of support of the different agencies connected to it just floored me. I never imagined that the ATC had this information to connect up to other groups.”

- Teacher participant

“The enthusiasm of TTEC participants reinforced the value of the AT as a significant place for learning, as well as the need to build wider networks to capitalize on the AT’s opportunity for learning.”

- Community partner participant
Many participants felt more confident to implement projects on a small scale in their own classrooms or local setting. A few reported feeling less confident to take on larger-scale, highly collaborative projects, such as some that were described as examples by the TTEC Institute staff.

**Implementing TTEC Projects along the Appalachian Trail**

A strong majority (73%) of participating educators developed written curriculum or drafted implementation plans for the upcoming school year, to varying degrees of completion. While members of several regional teams developed collaborative projects that would require mutual communication and support from each other and with partner organizations throughout their region, members of two of the regional teams decided to pursue individual projects at their sites, independent of other team members.

Most participants (62%) strongly agreed that they would be able to effectively implement their curriculum plans. Many agreed that there was adequate time provided for curriculum planning with regional teams, though some may have benefitted from more guidance in the planning process. As one institute instructor remarked,

> “I don’t feel we’ve coherently structured their team time enough... we ought to be building toward the ‘who, what, where’ all week. I’m really eager to sit down and re-do the agenda, to add more technique-type things earlier on. We haven’t done quite enough to launch the program for the first time. There wasn’t enough coherent guidance for the team planning time. We need a form for them to fill out that leads them through the week, and at the end they have something to show for it.”

“I’m ready to jump in feet first and get in over my head. I’m serious. I’ve never done anything like this, I never thought about doing anything like this, and I’m ready.”

- Teacher participant
In addition, the majority of participants (77%) agreed that some form of outside support would be necessary to effectively put their curriculum plans into practice. Participants cited several areas in which they will need continued support from local community organizations and AT partners to successfully implement larger-scale TTEC projects, including:

- **Follow-up opportunities throughout the school year**
  77% of survey respondents tended to or strongly agreed that they would like to participate in year-long, sustained TTEC professional development. The most appealing format for this type of ongoing training was a regional, 2-day workshop introducing educator to the TTEC program, followed later by a week-long summer institute, followed by two 2-day regional workshops offered during the school year. The most important aspect of the above combination was the week-long institute followed by the 2-day regional workshops.

- **Direct outreach to administrators**
  About 31% of participants strongly agreed that their TTEC curriculum plans would be supported by their school administration. Others, who anticipated some obstacles in this area, cited a need for training in how to ‘pitch’ their projects to their administrators. Many others suggested that the ATC or other partner organizations do direct outreach, such as inviting principals and school boards to trainings.

- **Website and other technical support**
  Early on during the training week, an institute participant who was technologically skilled spontaneously generated a website page devoted to collecting notes and activity plans from the institute. Many participants mentioned the value of this web resource, and cited a desire for ongoing and expanded electronic support as a communication tool and resource for lesson plans and activities.

“There are already a lot of ideas coming in. We’re idea rich and in competition with other initiatives. If our administration has another idea, they’re going to do that one—not ours.” - Teacher participant
• Funding resources
  When asked what they would need to successfully implement their TTEC projects in the upcoming school year, educators cited the need for financial resources for buying materials, transporting students to field sites, and release time from their classrooms when necessary.

Valuing the Appalachian Trail

"I have a better understanding of the history of the trail, the ATC and what it does. I view the AT now as a link for people and projects. I also have gained insight into the fact that kids need to understand the value of the AT so that they will and to preserve and protect it.”

- Community partner participant

As a result of the institute, participants began to value the Appalachian Trail (AT) more highly as a natural and cultural community resource and educational tool. They saw the trail as a greater educational resource for their students, gained more appreciation for the historical value of the AT, and left with a greater awareness of how the trail can serve as a networking tool for communities and organizations.

Participants who were more familiar with the AT before attending the institute did not report as large of an increase in their valuing of the trail after the institute. However, many who used the trail previously solely as a recreational tool shifted their mindset to view it more clearly as an educational resource and community asset. For some, the institute served only to confirm their awareness of the significance of the AT.

Additional Themes of Note

In addition to the major themes described above, which relate directly to the outcomes identified in the program logic model, the following themes emerged as contributing to the institute’s overall success.

A Coherent Frame for Place-Based Education & Service-Learning

The institute provided quality instruction that was responsive to the adult learner. The training offered a coherent frame for place-based education and service learning, rather than simply presenting activities in bits and pieces. Participants received a large amount of practical, hands-on information and skills, and reported that the written materials were extremely useful.

"Now I know how to take these pieces and put them together and plan out a program that will actually work, rather than just having bits and pieces and not knowing how to make it work. Now I’ve got some ideas, and I can’t wait to go home and plot out how I’m going to do it.”

- Teacher participant

70% of the institute participants agreed that the materials they received were ready to use at their school or organization. A small amount of participants (about 7%) reported
being overwhelmed by the amount of resources presented at the institute, stating that many of which they would probably not use. In general, educators stated that while they may not have had an opportunity to integrate all of the written materials during the institute itself, they felt they would take the time to look them over later and put them to use.

A few participants reported the need for a clearer articulation of institute goals, participant roles, expectations, and agenda before the institute began, which may have provided a more coherent frame for the training.

**An Environment Suitable for Learning**
The institute was delivered in a comfortable, flexible environment with outstanding facilities and opportunities to spend time outside in a natural setting. This helped to create an atmosphere of respect, personal connection, humor, and shared enthusiasm that was vital to the institute’s success. Some participants would have enjoyed having more time to spend outside in the natural environment that surrounded the facility, as well as more time on the AT itself. A few participants also expressed concerns that sessions did not always start on time and that side chatter during classroom sessions was sometimes distracting. Such complaints were minor, however, in comparison to the general enthusiasm for the facilities and program.

“I’ve felt really appreciated, like they’re really glad that I came.”
– Teacher participant
RECOMMENDATIONS & OPPORTUNITIES
FOR SUSTAINABILITY

Ongoing Professional Development

The TTEC Summer Institute represents a very successful first step in the replication of the Forest for Every Classroom (FFEC) program. As the majority (77%) of participants tended to or strongly agreed that they would be interested in participating in year-long, sustained TTEC professional development, it is recommended that the TTEC partners continue to move toward next steps in formalizing the Forest for Every Classroom (FFEC) program replication, using FFEC principles and practices that have been proven effective in their design strategies.

Specifically, it is recommended that TTEC partners pursue a professional development design that includes a more local, regional introduction to the TTEC program that is followed later by the intensive, week-long summer institute. Some participants reported the need for a clearer articulation of institute goals, participant roles, expectations, and agenda before the institute began, and this introduction would provide this more coherent frame for the training. However, the most highly valued aspect of potential ongoing training was the follow-up process.

It is recommended that the TTEC program partners continue to seek funding resources that will allow them to offer such ongoing training at no cost to participating educators. As one participant remarked,

“I have a fear that since this is a pilot, the next time it becomes available a cost is going to be slapped onto this. Once you do that, you’re losing a very important element – the relationship that the ATC is trying to forge with schoolchildren who are coming up through the ranks, who are the future resources. So an important aspect of that is the ATC’s responsibility to find a way to help the teachers who are here now network more with their colleagues, and to help them convince the next wave of people to come in and have it grow.”

Other Areas of Support

The institute evaluation provided a wealth of information on what types of continued support educators foresee as vital to the success of their TTEC-related curriculum. TTEC should consider the following actions as they seek to enhance their place-based education and service-learning efforts:
**Provide regular networking opportunities**

In addition to ongoing professional development that brings enthusiastic partners together, collaborative relationships between teachers and community partners could be established and maintained by providing opportunities for ATC staff to make site visits to schools. Funding for organizations to provide the staffing support necessary to maintain these connections would enhance the sustainability of the project.

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**Promote efforts that start small and locally**

The way that participants in this institute talked about the details of how projects actually succeed highlighted the importance of starting with solid, baby steps, and then spreading the success to other educators via participant enthusiasm, new knowledge, and first hand experience. As one teacher participant explained,

"I may use what I've learned, but I don't foresee right now exactly how I could get it started. If I had someone else from my school district or grade level, such as a science teacher, who shared the vision with me, it would be a lot easier to get it started. But the small things feel doable. Even during a 45-minute class period, we can get the kids outside, walk around the local field. Getting the kids outside and looking at a tree – this has given me some ideas I can think about."

Several participants recommended an extension of the 'train the trainer' professional development format, in which this first cohort of educators would return next summer as mentors with other educators they had recruited and begun to train. It is clear that the enthusiasm and energy generated by the institute participants could be used to expand the program from smaller, local beginnings to more collaborative, networked projects. Inviting participants who successfully implement TTEC projects during this next school year back as facilitators and mentors during the next round of training would likely add a level of richness to the program’s offerings, and promote continued sustainability of the program beyond just one year.

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"I think of this work as a big ball, and I have to push it up this big hill. But the more I think about it, it’s like a little snowball at the top of the hill and all you have to do is push it, and then it build and builds. It has its own momentum. It takes care of itself, even with all the obstacles along the way." – Teacher participant
Formalize regular support from partner organizations

Organizations such as the Appalachian Trail Conservancy, National Park Service, Appalachian Trail Park Office, and others are well positioned to become institutionalized elements of ongoing support of TTEC through:

- **Direct outreach to school administrators**
  It is recommended that ongoing TTEC professional development include some form of direct outreach to school administrators. Principals and school board members could be invited to attend TTEC regional trainings. If the infrastructure and staffing support were in place, TTEC might offer community forums focused on the integration of these teaching strategies into the community, inviting administrators, parents, and representatives from community organizations to attend.

  In addition, TTEC could more clearly help educators learn how to ‘sell’ place-based or service-learning activities to their administration. Additional emphasis on the impacts of place-based and service-learning approaches on student achievement would be one way to help increase educator’s ability to present new, innovative curriculum to their administrators. Much information on the relationship between place-based education and service-learning on student achievement is available through [www.PEECworks.org](http://www.PEECworks.org).

- **Website and other technical support**
  A website sponsored and maintained by ATC or one of the other TTEC partner organizations could be established. This website could offer lesson and activity plans, examples of and advice for real-life collaborative projects, threaded discussions between participants, and links to funding resources and other materials.

- **Funding resources for transportation, materials, and teacher release time**
  One of the primary challenges for many educators in implementing larger scale TTEC projects is their general lack of funding for materials and field trips off of school grounds. TTEC program partners should seek funding resources in order to continue to offer small grants to educators who successfully develop their TTEC curriculum plans. This financial support will help to sustain the program and promote access to the AT and other public lands for students across all socioeconomic levels.
APPENDICIES
Appendix A: PEER Evaluation Staff and Measures to Mitigate Researcher Bias

This evaluation was conducted under the supervision of principal investigator Michael Duffin, who guided the bulk of the evaluation activities and served as overall editor of the report document. Research Associate Megan Phillips contributed extensively to all phases of the evaluation, including design, implementation and report writing. PEER evaluator Dr. George Tremblay, core faculty in the Clinical Psychology doctoral program at Antioch University New England and Director of Research for that program, was consulted for assistance in the evaluation survey design.

The following measures were taken to mitigate the potential for researcher bias:

- All interviews were recorded and transcribed either fully or partially.
- Field notes for interviews and observations were typed up within 24 hours or less after completing on-site work.
- The PEER Associates team was intentionally constructed to represent complementary positivist and constructivist epistemological biases.
- Interview guides were developed and followed, and generally accepted methods for coding interview data were employed.
- Every effort was made to maintain high standards for methodological rigor.
## Appendix B: A Trail to Every Classroom Summer Institute Working Logic Model

**Drafted by PEER Associates (evaluators) based on program documents and conversations with program staff**

**v3a, June 28, 2006**

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<td>Place-based Education and Service-Learning initiative</td>
<td>Educator Professional Development: TTEC Summer Institute</td>
<td># of educators/ teams attending institute</td>
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<td># of states/ regions represented</td>
<td>Educators value the AT as a natural and cultural community resource and educational tool</td>
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<td>Educators/ teams successfully develop written curriculum or implementation plans for upcoming school year</td>
<td>Enhanced Educator Practice:</td>
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<td></td>
<td>Educators intend to implement TTEC plans in upcoming school year</td>
<td>a) Increased collaboration and communication between trail partners and schools</td>
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<td>Training materials, resources are accessible and used</td>
<td>b) Increased sense of efficacy (i.e. confidence and ability to realistically integrate place-based education and service-learning activities into curriculum)</td>
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<td>Place-based education and service-learning curriculum is supported by school administration</td>
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<td>Service learning on the AT is implemented in participating schools</td>
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<td>Student civic engagement on the AT increases</td>
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<td>Program becomes self-sustaining through teacher/ staff/ volunteer networks</td>
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<td>Students become involved in active volunteerism on the AT</td>
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<td>AT volunteer base increases</td>
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<td>Volunteers become ATC partner members</td>
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<td>AT stewardship increases</td>
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Appendix C: Focus Group Interview Guide, TTEC Summer Institute 2006
July 7, 2006, v2b

- I'm an outside evaluator with PEER Associates, hired by the Appalachian Trail Conservancy to help improve the program and help staff and funders figure out how to best sustain this program. While this IS an evaluation of the TTEC Summer Institute, it is definitely NOT an assessment of the performance of you or any other individual person.

- Main purpose today is to document how, if at all, this institute has influenced educator practice in regards to using the AT for place-based ed/service-learning.

- Your participation in this interview is entirely voluntary. We can stop at any time (including now).

- Your responses are confidential in that names are never used. Quotes are used. Only evaluation staff will see raw data. The aim is to help you feel comfortable offering critical perspectives if you have them, because that is where some of the most useful learning comes from. Like with a photograph, you need both the dark and the light in order to get the clearest picture.

- Data from these interviews will be transcribed and analyzed for inclusion in a formal, public report on the TTEC Summer Institute during late summer 06.

- Each person doesn’t have to respond to every question. The idea is to simply have a directed conversation amongst us as a group.

- Request permission to record, take notes, transcribe.

- Questions or concerns? (e.g. voluntary, confidential, purpose, use)

1) For starters, what have you liked most and least about the institute so far? (Additional prompts: Where did you feel least engaged? Most inspired? Most surprised? Any “ah-ha” moments, either “positive” or “negative”?)

2) Please help me understand how the work of this institute does or does not connect with the work you are hoping to do in the coming year. (Additional prompts: Where are you at in the curriculum planning process? How do you see the steps unfolding from before the institute, through during the institute and the rest of the summer, and then into the coming school year? What challenges to implementation do you foresee? How has the institute been helpful or a hindrance in the process of building a realistic service-learning, place-based curriculum plan? What TTEC activities, if any, seem unrealistic to you? How confident do you feel, on a scale of 1 to 10? What are the biggest confidence factors?)

3) How would you compare your perception of the AT a week or a year ago with your perception today? (Additional prompts: What has changed? How, if at all, do you see your relationship with the AT changing in the future? In your opinion, what do you appreciate most about the AT, both in general, and as it relates to your professional work? What has caused you to think of the AT like you do?)

4) I'd like to capture your thoughts on the structure and design of the institute. How useful and accessible are the written materials and resources provided through this institute? (Additional prompts: Are there specific materials that you found the most useful? Least useful? Delia’s manuals?) So far, have there been specific sessions that stand out for being particularly well or poorly organized, appropriate, or useful? (Additional prompts: Can you tell me about a specific moment that captures an important essence of this institute? Any suggestions for improving the overall schedule?) How effective do you feel the one week in the summer format is, compared to other forms of professional development you’re familiar with or could imagine? (Additional prompts: What would you think about
some kind of a year-long connection? What kinds of support do YOU feel would be most helpful for you as you
develop place-based service-learning curriculum for use with the AT? Where is the optimal balance between
your wish list and what’s realistic?)

5) **How would you describe the collaboration and communication between trail partners and
schools, both before this institute and as a (predicted) result of this institute?** (Additional prompts:
Have you developed connections with other institute participants that you think will help you in your
curriculum implementation? What specific suggestions might you have for how TTEC could facilitate more
or better collaboration and communication among key stakeholders?)

6) **How do you anticipate your school administration reacting to your TTEC curriculum plans?**
(Additional prompts: How supportive is your administration of innovative curriculum in general? What are
your biggest barriers to gaining administrative support?)

7) **Are there any additional important points about the TTEC institute that I should know about
or that you are particularly curious about?** (Additional prompts: Specific activities/institute events that
were most helpful or exciting, activities that were not helpful, other aspects such as relationship building, etc)

8) **Is there anything else that you’d like to share?** (Additional prompts: Brilliant insights? Pithy
summaries? Parting shots? Random ramblings? Closing comments?)
Appendix D: Survey Items, TTEC Summer Institute 2006

The following items were included in the on-line survey administered through the commercial survey package Survey Monkey.

1. Which time period best describes today?
   a. Summer 06
   b. 06-07 School Year
   c. Summer 07
   d. 07-08 School Year
   e. Summer 08
   f. 08-09 School Year
   g. Summer 09

2. Your Appalachian Trail region:
   a. West Virginia
   b. Virginia
   c. North Carolina
   d. Georgia
   e. Maine, NH/VT
   f. New York
   g. Schuylkill River Region, PA
   h. Boiling Springs, PA
   i. Other (please specify)

3. Your name:

4. Your role:
   a. Teacher
   b. Community partner
   c. Other (please specify)

5. F.11 In what ways (if any) has your perception of the value of the Appalachian Trail changed since your participation in the TTEC Institute?

6. F.50 In what ways (if any) has your confidence in your ability to integrate place-based and service learning activities into your curriculum/community changed as a result of participating in the TTEC Institute?

7. How much do you disagree or agree? For each of the following items, please check only the ONE box that BEST matches your opinion. (Each of the following items had a four-point agreement scale: Strongly Disagree, Tend to Disagree, Tend to Agree, Strongly Agree, Not Sure or N/A)
   a. K.17 The institute moved quickly to hands-on/direct practice/reflection without getting bogged down in instructor demos and lectures.
   b. K.37 The institute provided enough time for networking and sharing ideas among participants.
   c. K.38 I left the institute with materials in hand that are ready to use at my school or organization.
   d. K.40 I was overwhelmed by the amount of resources presented to me during the institute, many of which I'll probably not use.
   e. F.40 There was adequate time provided for curriculum planning with my regional team.
   f. F.41 The institute provided me with enough useful, real-life examples of place-based or service learning activities.
g. F.42 The institute provided me with a strong foundation in the theoretical principles and practices of place-based education and service learning.

8. F.51 Please tell us the three most important things we need to know in order to improve the design of the institute. Maybe there were particular sessions that warrant comment. Maybe the schedule should be changed (or NOT changed!) in particular ways. What else...?

9. The following items (F46-F49) only apply to you if you indicated your role as "Community Partner." Classroom teachers may skip items F46-F49. How much do you disagree or agree? For each of the following items, please check only the ONE box that BEST matches your opinion. (Each of the following items had a four-point agreement scale: Strongly Disagree, Tend to Disagree, Tend to Agree, Strongly Agree, Not Sure or N/A)
   a. F.46 I understand how my organization can collaborate with local schools and teachers to engage students in learning on the Appalachian Trail.
   b. F.47 The TTEC Institute provided me with practical skills for working with schools and teachers in my region.
   c. F.48 As a result of participation in the institute, I know how to go about initiating service-learning partnerships with schools.
   d. F.49 I know what types of ongoing support teachers need to engage their students in place-based and service-learning activities on the Appalachian Trail in my region.

10. How much do you disagree or agree? For each of the following items, please check only the ONE box that BEST matches your opinion. For the following items, if you are not a classroom teacher, think of replacing the words “I” or “me” with “the teachers I work most closely with.” All of the items on this page begin with: "During the last school year...” (Each of the following items had a four-point agreement scale: Strongly Disagree, Tend to Disagree, Tend to Agree, Strongly Agree, Not Sure or N/A)
   a. P.1a ...place-based and/ or service learning curriculum helped me (or educators with whom I worked) to meet local, district and/ or state learning standards
   b. P.2a ... I collaborated with other educators for curriculum planning.
   c. P.3a ... I felt energized and confident while teaching about the local environment and/ or community.
   d. P.4a ... it was difficult for me to cover traditional subjects through place-based or service learning curriculum.
   e. P.5a ... the curriculum in our school/ organization was well-coordinated throughout the grade levels.
   f. P.6a ...place-based and/ or service learning curriculum helped me to become a better educator.
   g. X.1a ... students with whom I worked were enthusiastic about learning.
   h. X.5a ... students with whom I worked preferred place-based or service learning activities to more traditional-style school activities.
   i. Y.3a ...people in our community were actively involved in trying to make the community a better place to live.
   j. L.6a ...students did community volunteering and/ or service-learning work to satisfy their educational requirements.

11. How often have these things happened during the last school year? For each of the following items, please check only the ONE box that BEST matches your opinion. The following items refer to the classrooms that you know best or work most closely with. All of the items on this page begin with: "During the last school year..." (The following items had a four-point response scale: Two days per year or less, Three to six days per year, About one day a month, One day a week or more, Not sure or N/A)
a. L.1a ...I used the school building and grounds (or other places outside of the classroom) as places for learning.

b. L.2a ... parents and/or other community members worked directly with students on school-related projects.

c. L.3a ...as part of school, students worked on real-world problems in their community, school buildings and/or school yard.

d. L.4a ...the content of classroom assignments and homework was directly connected to the local natural and/or urban environment.

e. L.5a ...students learned about and/or interacted with local cultural heritage, history and people through their schoolwork.

f. L.6a ...students did community volunteering and/or service-learning work to satisfy their educational requirements.

12. How much do you disagree or agree? For each of the following items, please check only the ONE box that BEST matches your opinion. For the following items, if you are not a classroom teacher, think of replacing the words “I” or “me” with “the teachers I work most closely with.” All of the items on this page begin with: "As a result of the TTEC Institute..." (Each of the following items had a four-point agreement scale: Strongly Disagree, Tend to Disagree, Tend to Agree, Strongly Agree, Not Sure or N/A)

a. P.1b ... I feel prepared to use place-based and/or service learning curriculum to help our school meet local, district and/or state learning standards.

b. P.2b ... I will collaborate with other educators for curriculum planning.

c. P.3b ... I feel energized and confident about teaching about the local environment and/or community.

d. P.4b ... it will be harder for schools/ organizations to cover traditional subjects through place-based or service learning curriculum.

e. P.5b ... I feel more prepared to help coordinate the curriculum in our school or organization throughout the grade levels.

f. P.6b ... I am a better educator.

g. X.1b ... students with whom I work will be enthusiastic about learning.

h. X.5b ... students with whom I work will prefer place-based or service learning activities to more traditional-style school activities.

i. Y.6b ... people (young and old) will become involved in solving real life problems in our community.

j. Y.7b ... the quality of the environment in our community will improve.

k. Y.8b ... students will collaborate with important decision makers in our community.

13. How often do you intend to these things to happen as a result of the TTEC Institute? For each of the following items, please check only the ONE box that BEST matches your opinion. The following items refer to the classrooms that you know best or work most closely with. All of the items on this page begin with: "As a result of the TTEC Institute..." (The following items had a four-point response scale: Two days per year or less, Three to six days per year, About one day a month, One day a week or more, Not sure or N/A)

a. L.1b ... I will use the school building and grounds (or other places outside of the classroom) as places for learning.

b. L.2b ... parents and/or other community members will work directly with students on school-related projects.

c. L.3b ... as part of school, students will work on real-world problems in their community, school buildings and/or school yard.

d. L.4b ... the content of classroom assignments and homework will be directly connected to the local natural and/or urban environment.
e. L.5b ... students will learn about and/or interact with local cultural heritage, history and people through their schoolwork.
f. L.6b ... students will do community volunteering and/or service-learning work to satisfy their educational requirements.

14. How much do you disagree or agree? For each of the following items, please check only the ONE box that BEST matches your opinion. (Each of the following items had a four-point agreement scale: Strongly Disagree, Tend to Disagree, Tend to Agree, Strongly Agree, Not Sure or N/A)

a. F.2 I expect to implement my TTEC curriculum plans next year.
b. F.3 Since participating in TTEC, I expect to call on parents or other community members to assist in my teaching more often.
c. F.5 Ongoing support from TTEC partners after the institute (whether formally, as in workshops, or informally as in emails or phone calls) is necessary for successful implementation of TTEC curriculum.
d. F.6 The TTEC institute would have been just as successful without so many partner organizations involved in its creation and delivery.
e. F.7 Since participating in the TTEC Institute, I see public lands as more valuable.
f. F.43 My TTEC curriculum and accompanying action plans are currently drafted.
g. F.44 I expect that place-based and/or service learning curriculum plans will be supported by the local school administration.
h. F.45 I would be interested in participating in year-long, sustained TTEC professional development.

15. Please rank the following program design options in order of preference for how useful you expect they would be for your practice. Each choice may be selected only once. (The following items had a four-point response scale: Most Useful, Very Useful, Somewhat useful, Least useful, Not Sure or N/A)

a. F.52 The week-long summer institute only.
b. F.53 The week-long summer institute, followed by two 2-day regional workshops in my area offered during the school year.
c. F.54 A local regional, 2-day workshop introducing me to the TTEC program, followed later by the week-long national summer institute.
d. F.55 A regional, 2-day workshop introducing me to the TTEC program, followed later by the week-long national summer institute, followed by two 2-day regional workshops offered during the school year.

16. F.56 Please use the space below to comment on any of your rankings above (e.g. suggest alternatives or additions to the options listed, or topics for regional workshops that you would like to see).

17. v. non-TTEC college or graduate level courses related to place-based or environmental education I've taken =
18. w. non-TTEC workshops/ conferences/ seminars related to place-based or environmental education I've attended =
19. x. non-TTEC place-based or environmental education books/ curriculum guides I've read =
20. y. non-TTEC place-based or environmental education articles/ lesson plans I've read/ studied =

21. F.12 Please use this space to clarify any of your responses, or to comment on any aspect of your experience at the TTEC Institute.
22. If you have any comments about the process or content of this survey, we'd love to hear them. Don't be shy. ;-)