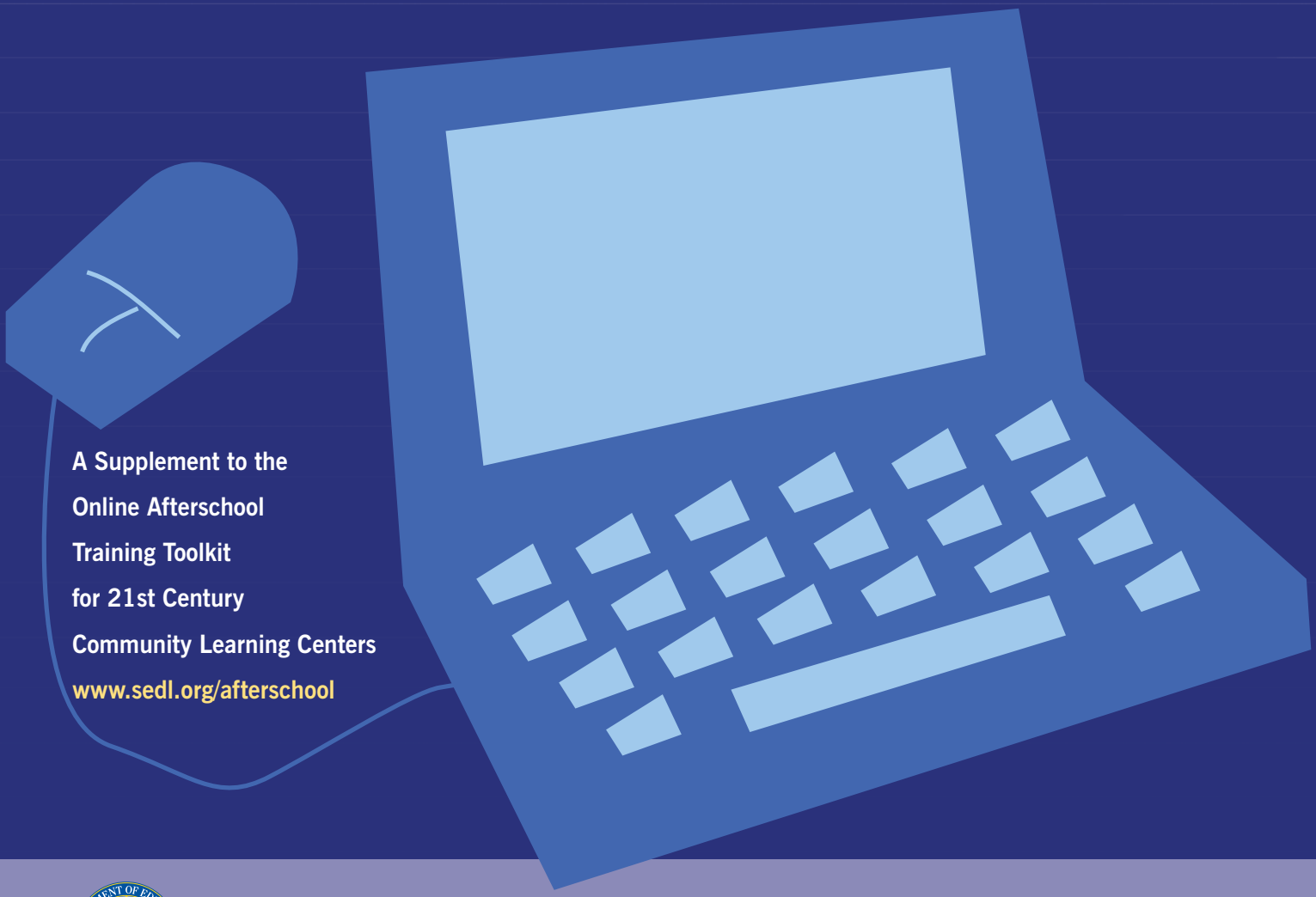
TECHNOLOGY IN AFTERSCHOOL

A Guide to Using the AFTERSCHOOL TRAINING TOOLKIT for Professional Development



A Supplement to the Online Afterschool Training Toolkit for 21st Century Community Learning Centers

www.sedl.org/afterschool

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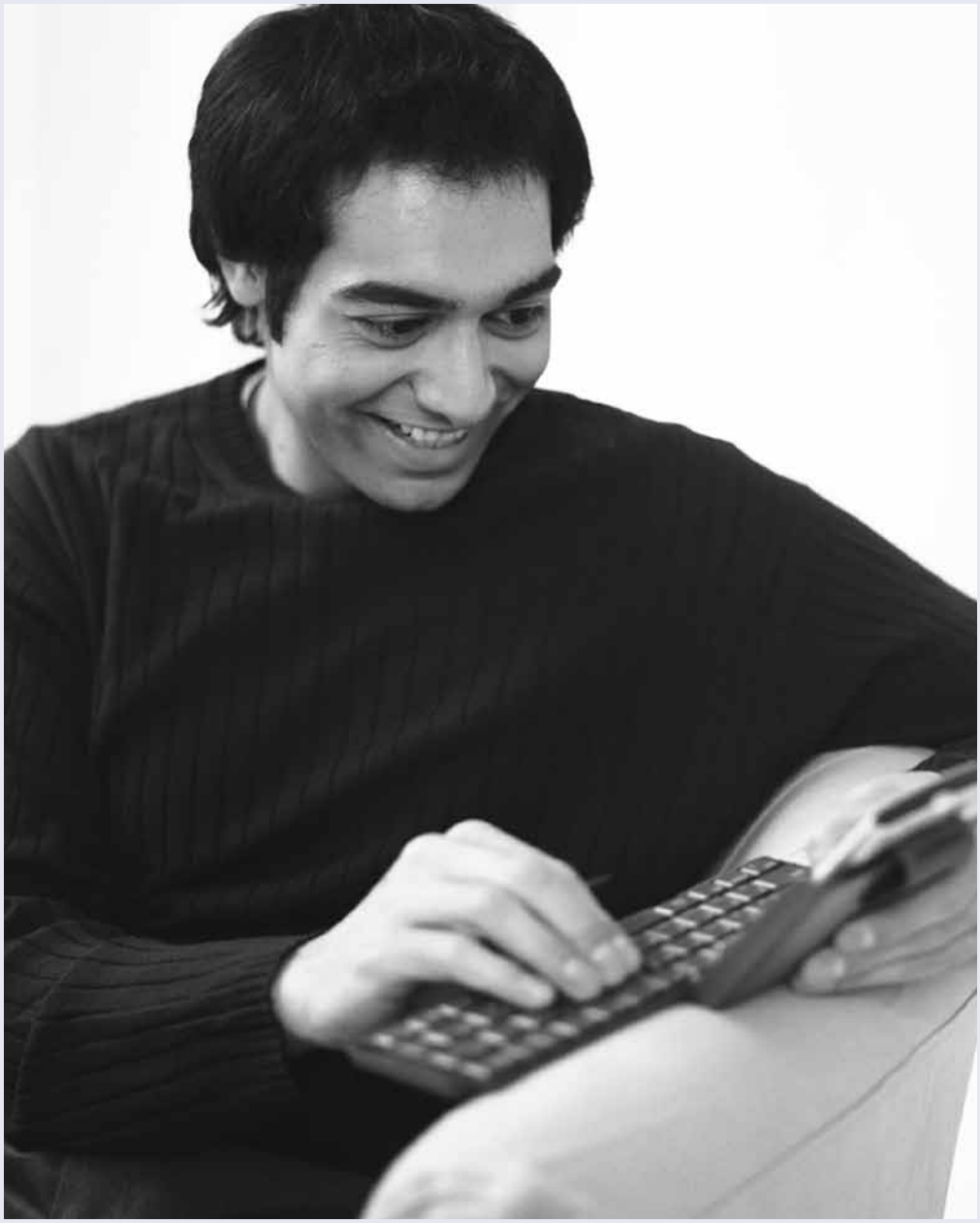
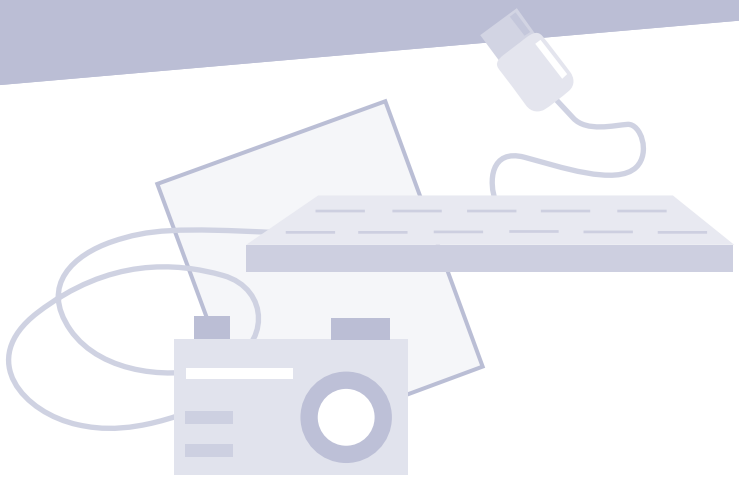



AFTERSCHOOL TRAINING TOOLKIT
About Academic Enrichment in Afterschool
TECHNOLOGY
About Technology in Afterschool



About This Guide

What Is the Purpose of This Guide?

It may seem daunting to begin incorporating technology into an afterschool program with either a simple activity or a project activity, yet many programs have done so with great success. Although there is no blueprint for getting started, this guide will help you and your staff develop the skills and confidence for introducing technology-enriched activities into your program.

The purpose of this guide is to help afterschool staff learn how to use the technology section of the National Partnership for Quality Afterschool Learning's (National Partnership's) Afterschool Training Toolkit and other free resources for staff development. This guide includes practical suggestions and easy-to-follow guidelines for a variety of activities using the toolkit and its related resources.

This guide focuses on using a practical staff development model for learning about the six technology practices featured in the Afterschool Training Toolkit and how they can support learning. Each technology practice is introduced with two to four activities ranging in length from 15 to 20 minutes. Activities include watching videos, planning lessons, and reading related resources.

You can modify these ideas and times to meet the specific needs of your site; however, they provide a place to begin planning. In addition, do not hesitate to expand on the ideas presented here to capitalize on the interests of your staff.

What Is the Afterschool Training Toolkit?

The Afterschool Training Toolkit (www.sedl.org/afterschool/toolkits), developed by the National Partnership, is a free online source of research- and standards-based instructional practices. The toolkit is divided into sections that address six content areas (literacy, math, science, technology, the arts, and homework help) and is designed to help staff create quality afterschool learning activities. Included in the toolkit are videos, promising practices, lesson plans, standards, and resources in the six content areas.

The main focus of the technology section of the toolkit (www.sedl.org/afterschool/toolkits/technology) is on six promising practices that research suggests improve student learning. These practices do not form a curriculum. They do, however, easily support project-based activities and inquiry-based learning instruction with a variety of ideas, lessons, and technology tools.

The National Partnership also created the following three related resources:

- **Afterschool Lesson Plan Database** (www.sedl.org/afterschool/lessonplans): The Afterschool Lesson Plan Database contains more than 100 lessons afterschool practitioners may find useful in their programs. You can find lessons for technology, literacy, math, science, and the arts and strategies for afterschool homework help. Using the advanced search feature, you can find lessons that focus on family and community, homework and tutoring, and project-based learning. You can also search for lessons that include a video and submit your own lessons to be considered for the database.
- **Afterschool Technology Curriculum Resource Guide** (www.sedl.org/afterschool/guide/technology): This collection of resources is designed to help you locate and make informed choices about high-quality technology resources to enrich your afterschool program. These curricular materials represent the wide variety of resources, from activity guides to online games to software packages, that can support compelling technology-enriched learning experiences in informal settings. You can browse through all the resources by title, grade level, or subject area. On the search page, you can find curricula that match your specific needs by selecting keywords, design features, technology type, or subject area.
- **Technology in Afterschool: An Instructor's Guide to the Afterschool Training Toolkit** (Heath & Dick, 2008): This publication is designed for afterschool instructors and includes 30 lesson plans that support the six promising technology practices. Each lesson includes a grade-level designation, duration, description of technology needed, list of technology skills prerequisites, planning guide, list of steps for carrying out the activity, and reflection guide.

Why Include Technology in Afterschool?

Creating activities that attract and maintain high student interest while improving academic achievement should be a goal of any afterschool program. Technology can provide added interest and excitement. Following are several specific reasons to integrate technology-enriched activities into your afterschool program:

Students love to use computers. Offering exciting technology-enriched activities can spark students' imaginations and enthusiasm. With the Internet, technology can link students around the world to interactions, collaborations, special events, projects, destinations, and active exchanges with experts. Everyday activities such as homework and researching interests can become fun and engaging with a variety of technology tools. In addition, computer technologies can meet a variety of learning styles and academic needs.

Technology-enriched activities are a perfect fit for afterschool. Inquiry and exploratory activities often require flexible time that afterschool can offer and tools that only technology can provide. Technology-enriched activities also provide tremendous opportunities to reinforce reading, writing, math, and science skills and assist in completion of homework and school assignments.

Technology-enriched activities help prepare students for the future. Students need to know how to live and work with technology. When students have access to computers and other technology tools, they learn new skills that open up a wide array of opportunities for their future careers. The availability of technology greatly enhances the ability of students to prepare for the world they will be working in.

Technology-enriched activities can help market your afterschool program. Offering creative technology activities for students can be a strong marketing tool for your afterschool program. In a survey by the U.S. Department of Education (1999), 74% of Americans agree that computers improve the quality of education, and parents cited access to technology and computer literacy as their number-one priority for afterschool activities.

Technology-enriched activities can help narrow the digital divide. Afterschool programs can help narrow the digital divide in terms of computer use. A study by DeBell and Chapman (2003) shows that disadvantaged children and adolescents use the Internet at a higher rate at school than nondisadvantaged students. Also, 52% of students who use computers at school are from families with an annual income below $35,000, and 59% of those students have parents who have not completed high school. These figures point to a need and opportunity for afterschool programs.

Technology-enriched activities provide enrichment for instructors. Afterschool educators themselves can use technology tools, especially the Internet, to find a myriad of resources for instruction or to connect with other afterschool educators seeking learning opportunities.

What Are Some Suggestions for Introducing Technology Into Afterschool?

If you are in the early stages of introducing technology into your afterschool program, your instructors may lack confidence with their technology skills and with managing the classroom. Here are several key reminders to consider:

Start with modest goals. When introducing computers into afterschool activities, start with a small project. Have staff choose an academic content area that would be enhanced with the use of technology and is appropriate for students and for the time available. As the comfort levels of the instructor and students increase, expand the variety of technology activities and complexity of projects.

Maintain focus on learning outcomes. Consider how content in math, reading, science, or the arts can be improved with the addition of a technology component. For example, map reading activities can become an exciting adventure by using live, real-time maps from the Internet. Supplement research with some Internet resources, have students use a word processor rather than writing a report in longhand, or use a digital camera to take photos of an event as part of a story-telling activity. Explore other similar projects and adapt them to your use. Remember that the focus is not on technology but on learning outcomes.

Learn from students. Many students have grown up around technology and feel comfortable using it. Encourage your instructors not to be embarrassed if their students know more about technology than they do. Welcome opportunities to learn from students and recognize their curiosity and creativity.

Select the right technology. Carefully consider what technology, if any, should be offered. Different ages and grade levels sometimes require different approaches. The following guidelines may help you in your planning:

Early elementary (grades preK–1): There is a current debate regarding the value of computer use among very young children. Critics feel that these children should concentrate on developing their gross motor skills and social skills and follow their natural curiosity in ways that are not subjected to the constraints inherent in computer technology. Others (especially parents) feel that it is important for children to master technology so as not to fall behind their peers. Using technology activities that promote hand-eye coordination and matching of colors, letters, words, and numbers may be the most appropriate for early elementary children.

Elementary (grades 2–3): Depending on the development of individual students at grades 2–3, consider many of the same activities as those for early elementary students. Incorporating the use of digital cameras and keyboards into reading, writing, listening, and drawing activities can be effective. Reading and looking at pictures from a CD-ROM or using science tools such as microscopes and probes are also possibilities for this age group.

Upper elementary (grades 4–5): Upper elementary students should possess the skills to read, write, and analyze information. Therefore, they can effectively carry out research and project-based activities with a variety of technology tools.

Middle school and high school (grades 6–12): With appropriate technology skills, students at this level can produce professional-quality projects and products in a variety of content areas with a variety of technology tools.

Ask for help. For many, keeping up with and understanding technology may seem overwhelming. Learning how to use technology, however, is easier than it appears. It just takes time. Don't let difficulties deter progress and opportunities for tapping into technology's true potential. There are many experienced educators and online resources available. Don't be afraid to ask for help.

Provide frequent staff training. Staff-training events on technology can be as brief as 15 minutes or as long as several hours. Staff can learn technology tips from each other or from online resources. Be resourceful, creative, and consistent. Always schedule the time. Small increments will add up quickly and provide positive results.

How Can I Prepare My Staff?

There are many professional development strategies you can use for your afterschool staff. You may want to use a variety of approaches to accommodate different needs and different ways instructors approach their content area. What works for one person may not work for another. Learning how to use a specific technology tool should be embedded in any learning activity. Your training sessions should model this approach. Always offer hands-on relevant sessions that use technology to solve a problem or accomplish a task and provide handouts or support materials that can be used outside the training sessions.

Because of time and scheduling limitations, there are certainly no easy answers for how to prepare your staff with all the training that you would like to provide. Nevertheless, there are some effective techniques you can use to advance technology use in afterschool.

Evaluate staff needs. First, survey your staff. Find out what your staff needs in terms of technology use in their afterschool activities. Is your staff just becoming aware of technology and its potential impact? Or do they have existing skills and experience? Once you understand their needs, you can create meaningful technology professional development offerings.

Offer single sessions. A single session is the most common way of delivering professional development. This approach is primarily used where compressed schedules are an issue. If there is no relationship to a classroom application or follow-up sessions, however, single sessions are not an effective approach and in fact are the least effective in terms of what instructors take back and implement in their teaching. If the single-session approach is your only practical option, create themes or multiple sessions that relate to each other.

The Afterschool Training Toolkit can be easily and effectively incorporated into a variety of afterschool staff gatherings. This guide discusses a model for using the Afterschool Training Toolkit as a staff development tool. The model uses the single-session approach, but as few as one and as many as 10 related sessions can help staff learn techniques for designing engaging afterschool activities.

Not all professional development takes place in group settings. In fact, instructors' most meaningful experiences tend to be those in which they learn from their colleagues, especially when it comes to translating what is learned in a workshop into everyday classroom practices.

Develop a common vocabulary. Not everyone has the same definition of the term "technology-enriched activities." For some, it means teaching students about computers or allowing students to use computers for games and tutorials. For others, it means using technology tools to support learning in the content areas. A common vocabulary will help develop common goals.

Provide examples. You can talk all day about how to create technology-enriched activities with students, but what does this actually look like? Rather than trying in vain to explain what you're doing, invite other teachers to see what you're doing. Offer to model a lesson or unit. Offer to teach a lesson—using technology—to a colleague's class. Make sure that your colleague stays in the room to watch what you are doing and to observe his or her students' responses.

Model the use of technology everyday. Teachers will be prompted to use technology if it is modeled by both administration and staff and is a central part of their work. Suggestions for modeling include using e-mail regularly, sharing information gathered via e-mail and the Internet, and participating in teacher technology training and professional development events.

Encourage sharing and collaboration. Don't forget that your staff are valuable resources and can learn a lot from each other. Set aside both formal and informal times to share. Reflect and share successes, failures, and lessons learned. Technology use and integration is a slow, incremental process, so stick with it! Success is in the numbers (i.e., several instructors using technology can make a bigger impact than a single instructor).

Provide one-on-one and just-in-time training. One of the biggest concerns after finishing a technology training is knowing whom to call for help later. Designate a person who can be available to answer technology-related questions. The ideal person for this job is someone who is familiar with both your curriculum and the technology. Consider using students with technology experience to assist in this role.

Use peer coaching. Peer coaching frequently takes place between teachers who teach similar subjects, teach the same age group, are located in rooms close to each other, or are professional colleagues. This form of training is perhaps the most beneficial because it is the most personal. Some programs have gone so far as to create a buddy system to form a peer-coaching network.

Using the Afterschool Training Toolkit for Staff Development

Ongoing staff development is key to implementing technology effectively into your afterschool program. It's not always easy to find the time to work with staff, however. Whether you have a 2-day training or just 15–30 minutes a week, you can use the Afterschool Training Toolkit to help your staff learn more about integrating technology into their lessons to improve their work with students and support academic success.

To help you develop a well-trained staff, we designed a staff development model that is based on a phased approach with recognized levels of learning (see Handout A in the back of this guide). With this model, staff can move through a progression of activities to help them learn about the resources in the Afterschool Training Toolkit. They will learn to reflect on their current practice and try new approaches to teaching. The phases, described on the following pages, are sequential and build on each other.

10 Ways to Use the Afterschool Training Toolkit

On the following pages are 10 ways to use the Afterschool Training Toolkit for professional development. These 10 ways include several suggested activities that you can use either in a single staff development session or in multiple staff development sessions. They are incorporated into the various phases of the model described above. Some activities require only 15 minutes to carry out.

Phase 1: Create Awareness

Goal: Learn about new concepts and ideas and related resources.

1) Introduce the Toolkit — 15 MINUTES

- Provide a demonstration tour for your staff of the Afterschool Training Toolkit (www.sedl.org/afterschool/toolkits).
- Show promising practices from a content area and explain how they can be used to help improve student learning through effectively designed activities.
- Invite staff to explore the toolkit on their own and/or schedule another session to introduce and discuss a specific content practice.

2) Introduce a Promising Practice Using a Video — 15–30 MINUTES

- Watch and discuss a video from the toolkit on a selected practice in the toolkit.
- Discuss and facilitate key elements of the practice in the video.
- Review the difference between a “practice” and a “lesson” or “activity.”

3) Introduce a Practice Through Reading — 15 MINUTES

- Provide staff with a printed copy of a scenario about a selected practice or ask them to read about the practice online.
- Describe and discuss the goals of instruction in the scenario or practice.
- Ask staff to compare the information with their current instructional practice.

Phase 2: Build Understanding

Goal: Expand knowledge and understanding of key ideas and concepts of a chosen topic.

4) Learn the Theory Behind a Practice — 15–30 MINUTES

- Provide staff with a printed copy of a selected practice or ask them to read it online.
- Discuss the last two sections of the practice (“What Do I Do?” and “Why Does It Work?”).
- Ask staff to compare the information with their current instructional practice.

5) Examine a Sample Lesson — 15 MINUTES

- Look at a sample lesson for a selected practice in the toolkit.
- Discuss the parts of the sample lesson or activity.
- Compare the sample with lessons or activities to those that staff are currently using.
- Discuss possibilities for improving an existing activity or creating a new one.

Phase 3: Make Decisions

Goal: Assess needs and decide how to incorporate new knowledge into current practice.

6) Choose a Practice — 15 MINUTES

- Bring staff together to discuss academic priorities in view of program goals and student needs.
- Explore a selected content area of the toolkit and identify a promising practice on which to focus.
- Decide how the practice can be used in enrichment activities. Look at sample lessons for ideas.
- Assign staff to work as a team to develop an instructional activity based on the selected practice.
- Ask staff to follow the "Planning Your Lesson" guidelines and use the lesson planning template to develop their activity.

Phase 4: Plan and Prepare

Goal: Plan and prepare to implement a practice based on new knowledge.

7) Develop an Activity — 30 MINUTES

- Ask staff to discuss the activity they are developing.
- Ask staff what they would need to be able to implement the activity, (e.g., books, paper, markers, maps, computers, more knowledge, rehearsals).
- If your staff need more time to develop the activity, schedule another planning meeting so they can work together again.

8) Rehearse a Planned Activity — 30 MINUTES

- Have your staff rehearse their activity through role-playing.
- Facilitate a discussion on the experience.
- Ask staff to be mindful of student engagement when they actually deliver the activity with students and to jot down notes for discussion at a follow-up session.

Phase 5: Reflect and Refine

Goal: Reflect on implementation and improve, refine, or extend the activity.

9) Reflect on Instruction — 30 MINUTES

- Have staff discuss their experiences after implementing the activity with students. Remind them to draw on notes they may have taken during and after the activity.
- During the discussion, ask what went well, what needs work, and how the activity helped students build the targeted academic skills.
- Following the discussion, ask staff about ways everyone can work together to improve implementation of the practice. Ask what they can do to modify the activity before conducting it again.
- Ask staff how they can help one another become better at this practice.
- Ask staff what other activities might be created using this practice.

Phase 6: Extend Learning

Goal: Explore additional resources to build on knowledge gained through recent experience.

10) Explore Additional Resources — 15 MINUTES

- Have staff look at the "Resources" tab on the practice page and think about ways to extend their knowledge about the practice. Invite them to create variations of the activity or a new activity based on other examples they may find.
- Have staff work in pairs or as a group to review standards related to the given content area and have them think again about how the practice promotes skills related to expectations for students.
- Allow staff to learn more about the content area using the suggested resources.
- Ask staff to make suggestions on what other practices would complement and support what they have already begun.

Exploring the Technology Section of the Afterschool Training Toolkit

Now that you have read about the model and 10 ways to learn about the Afterschool Training Toolkit, we invite you to go through this process using the technology section of the toolkit. Each time you work on implementing a specific practice, you will find that this effort will build the knowledge and skills of your afterschool staff. This, in turn, will help staff implement fun and engaging technology-enriched activities that support academic enrichment for your students in afterschool.

The practices, lessons, activities, videos, and resources in the technology section of the Afterschool Training Toolkit are drawn from a combination of sources: a study of high-quality afterschool technology programs, on-site visits, staff interviews, classroom observations, national technology standards, and the combined professional expertise of the development team. Overall, the content promotes the skills students need to learn and live in today's world.

Afterschool technology-enriched activities should support the following goals:

- Facilitate learning, communication, creativity, and self-expression.
- Promote student-centered activities where the student becomes involved in determining the course of his or her own learning.
- Motivate and engage students in authentic, real-world, relevant activities.
- Promote opportunities for communication and collaboration in project-based and inquiry-based activities.
- Support activities that promote problem-solving and higher-order thinking skills.
- Support different learning styles.
- Be safe, operational, and accessible to all.

Promising Practices in Technology

The practices in the technology section of the toolkit (www.sedl.org/afterschool/toolkits/technology), described below, focus on instructional uses of technology rather than on specific technology tools or applications. Therefore, although technology is rapidly changing, the practices will not become obsolete.

Practice One

Developing Self-Expression and Creativity

In this practice, students use technology to work collaboratively on projects, products, publications, or other creative works. Activities are commonly theme-based and integrate knowledge and skills from multiple content areas. This practice helps students develop self-expression and self-management skills. The instructor serves as a collaborator to facilitate the process for completing the project.

Practice Two

Gathering and Sharing Information

As the name suggests, this practice focuses on using technology to collaborate, communicate, and gather and exchange information for investigative and research projects in math, science, literacy, and the arts. When using these tools, students learn new skills as well as safe and correct uses of digital information. Students help with the choice and direction of projects.

Practice Three

Finding and Solving Problems

This practice uses technology in the process of finding and solving problems. The instructor guides the students with skillful questioning to identify a problem that both interests them and draws on their prior experience and knowledge. The community provides an excellent source for identifying problems and also serves as an opportunity for service-learning activities.

Practice Four

Living and Working With Technology

In this practice, students learn about technology they will encounter in the workforce and in the everyday world around them to encourage them to consider careers requiring technology knowledge and skills. Students have the opportunity to connect with business and other organizations in the community.

Practice Five

Learning in Virtual Spaces

This practice focuses on activities that use electronic tools such as the World Wide Web, e-mail, or videoconferencing to deliver virtual learning opportunities across geographic

boundaries. It provides instruction and collaboration for students who cannot meet face-to-face. Technology enables students with special needs to participate in activities that might not otherwise be available to them. This practice shows why the Internet has been described as a living, ever-changing resource for learning.

Practice Six

Building Skills and Understanding

The goal of this practice is to challenge students through educational computer games, puzzles, electronic books, and other forms of programmed instruction such as tutorials and integrated learning systems. Students learn "from" the computer program in this practice, and learning can vary according to content area or purpose. This practice can directly or indirectly support learning objectives in the afterschool setting for even the youngest students.

Getting to Know the Technology Section of the Toolkit

Here are some easy ways to introduce the technology section of the toolkit and its six practices to your staff. In these activities, you will build awareness and help your staff begin their understanding of the toolkit and its contents. These activities are developed from the staff development model described earlier (see Handout A).

Phase 1: Create Awareness

Goal: Learn about new concepts and ideas and related resources.

Strategy 1: Introduce the Toolkit — 15 MINUTES

- Provide a tour of the technology section of the Afterschool Training Toolkit for your staff. You will need a computer connected to the Internet and to a projector.
  - Go to the Afterschool Training Toolkit home page (www.sedl.org/afterschool/toolkits) and point out its features and contents.
  - Click on the word "Technology" from the "Promising Practices in Afterschool" list. The "About Academic Enrichment in Afterschool" page will appear. This page provides background information and a rationale for using technology in afterschool, along with a short video. Explain the page to your staff.
  - Click on the name of one of the technology practices listed in the sidebar on the right.
  - When you reach the main practice page, point out and explore the tabs on that page ("Practice in Action," "Planning Your Lesson," "Sample Lessons," and "Resources").
  - Point out the topics listed on the sidebar ("Related Practices," "Support Materials," "Standards Refresher," "The 5E's," and "Literature Review").
- Invite staff to explore the toolkit on their own and/or schedule another session to introduce and discuss a specific content practice.

Strategy 2: Introduce a Promising Practice Using a Video — 15–30 MINUTES

Handout B

- Show your staff one of the videos in the technology section of the toolkit. The toolkit offers short videos of students in an afterschool program engaged in a particular practice. Watching these videos shows participants what has been done in other afterschool programs, and the related discussion provides them with background knowledge of that practice. Choose one of the following videos:
  - "The Elvana Project" (from the *Developing Self-Expression and Creativity* practice) www.sedl.org/afterschool/toolkits/technology/pr_developing.html
  - "Hide and Seek With Geocaching" (from the *Finding and Solving Problems* practice) www.sedl.org/afterschool/toolkits/technology/pr_finding_solving.html
  - "Making Music" (from the *Living and Working With Technology* practice) www.sedl.org/afterschool/toolkits/technology/pr_living_working.html

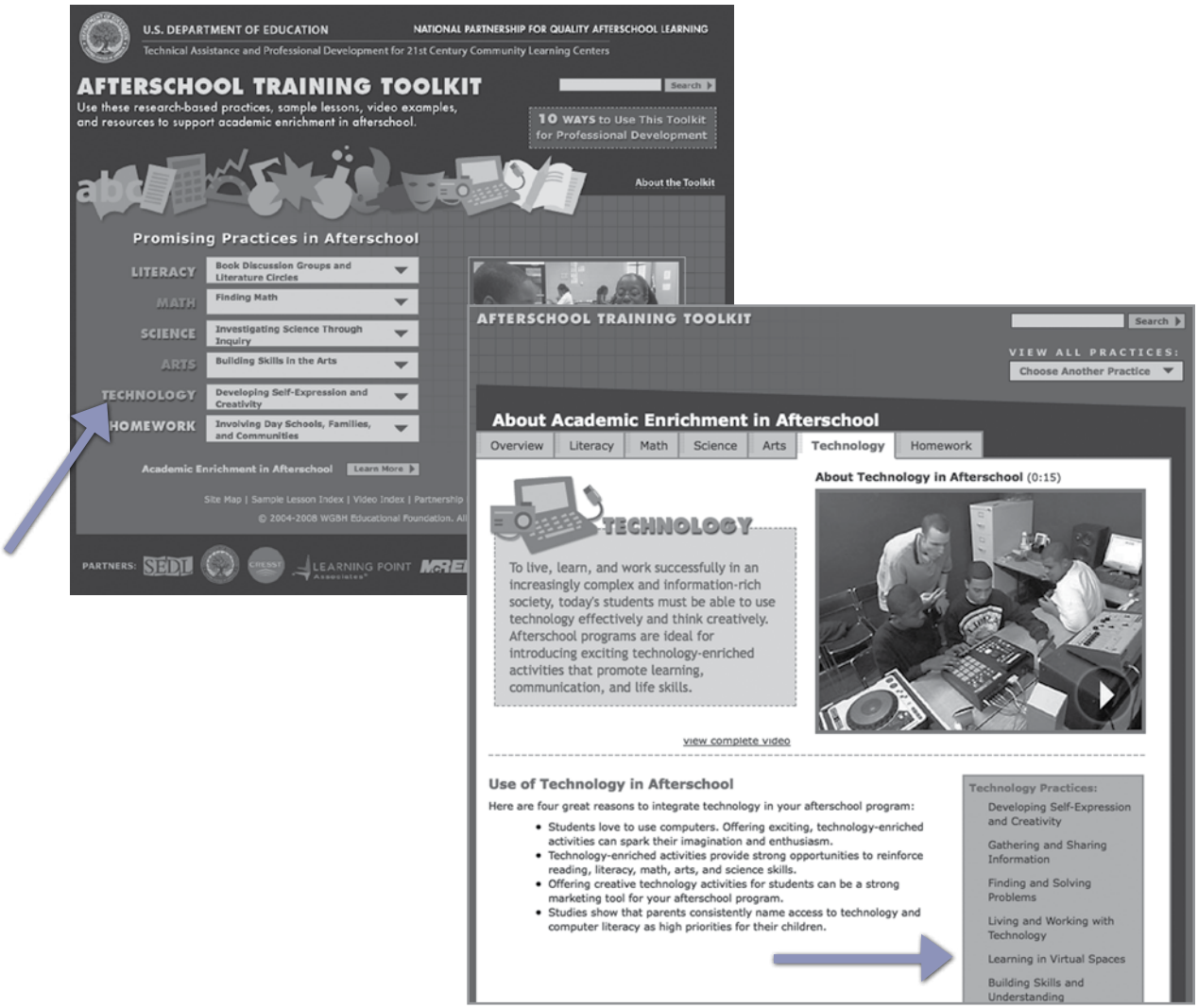
- Use the "Video Viewing Guide" (Handout B) to lead a discussion on the video. After this discussion, participants should start to become aware of the purpose of a practice, what it looks like, and ideas they might use.

Strategy 3: Introduce a Practice Through Reading

15–30 MINUTES

Handouts C and D

- Divide your staff into small groups of three or four.
- Provide each group with a printed copy of a scenario. If you have several small groups, provide a different scenario for each group; if you have a limited amount of time, choose only one scenario. See Handout C for the scenarios and Handout D for the technology practices.
- Ask the groups to read and discuss their scenario and answer the accompanying questions.
- Once they have finished, ask the groups to share their scenario with the whole group.



Phase 2: Build Understanding

Goal: Expand knowledge and understanding of key ideas and concepts of a chosen topic.

Strategy 4: Learn the Theory Behind a Practice — 15–30 MINUTES PER PRACTICE

- Guide staff through each individual practice to help them understand what it means and how technology is used to promote learning. Watching a practice's related video, if available, might be a good way to start the activity.
- Provide staff with a printed copy of the "Practice in Action" tab or ask them to read it online.
- Discuss the topics on that page ("What Is It?" "What Do I Do?" and "Why Does It Work?").
- Ask staff what technologies and ideas they have for creating an activity following the concept of this practice.
- Ask staff to compare the information with their current instructional practice.
- Complete this process for all six practices.

Strategy 5: Examine a Sample Lesson — 15–30 MINUTES PER PRACTICE

Choose a sample lesson from the "Sample Lessons" tab of each practice to discuss.

- Discuss the parts of the sample lesson ("Duration," "Learning Goals," etc.).
- Compare this lesson to those that your staff are currently using.
- Discuss how this activity might be carried out in your afterschool program. Ask participants how they might use new ideas gained from the video to guide their next steps.
- Ask staff to explain the difference between a "practice" and a "lesson."

Phase 3: Make Decisions

Goal: Assess needs and decide how to incorporate new knowledge into current practice.

Strategy 6: Choose a Practice — 30–60 MINUTES

- Bring staff together to discuss academic priorities in view of program goals and student needs. Discuss how technology can support those goals.
- Explore the other content areas in the toolkit (literacy, math, science, and the arts).
- Discuss how technology can be integrated into those content areas to engage students and improve learning outcomes.
- Decide how a technology practice can be used in enrichment activities. Look at sample lessons for ideas.
- Choose the technology practice that best supports the chosen content area.

Phase 4: Plan and Prepare

Goal: Plan and prepare to implement a practice based on new knowledge.

Strategy 7: Develop an Activity

30–60 MINUTES

Handouts E and F

- Have staff work as a team to develop an instructional activity based on their selected practice.
- Ask staff to consider the academic skills the activity targets and how technology supports the learning taking place.
- Ask staff to follow handouts E ("Getting Started: Considerations for Activity Planning") and F ("Lesson Planning Template") to develop the activity.
- Ask staff what they need to implement the activity. Possible needs include materials, computers, or more knowledge.
- If your staff needs more time to develop the activity, schedule another planning meeting so the team can work together again.

Strategy 8: Rehearse a Planned Activity

30–60 MINUTES

- Have your staff rehearse their activity through role-playing.
- Facilitate a discussion on the experience.
- Ask staff to be mindful of student engagement when they actually carry out the activity with students and to jot down notes for discussion at a follow-up session for reflection and sharing.
- Have staff carry out the activity with students.

Phase 5: Reflect and Refine

Goal: Reflect on implementation and improve, refine, or extend the activity.

Strategy 9: Reflect on Instruction

30 MINUTES

Handout G

- Have staff discuss their experiences after implementing the activity with students. Remind them to draw on notes they may have taken during and after the activity.
- During the discussion, ask what went well, what needs work, and how the activity helped students build the targeted academic skills.
- Following the discussion, ask staff about ways everyone can work together to improve implementation of the practice. Ask what they can do to modify the activity before conducting it again.
- Ask staff how they can help one another become better at this practice.

- Ask what other activities might be created using this practice.
- Use Handout G ("Post-Activity Reflection") to guide your discussion.

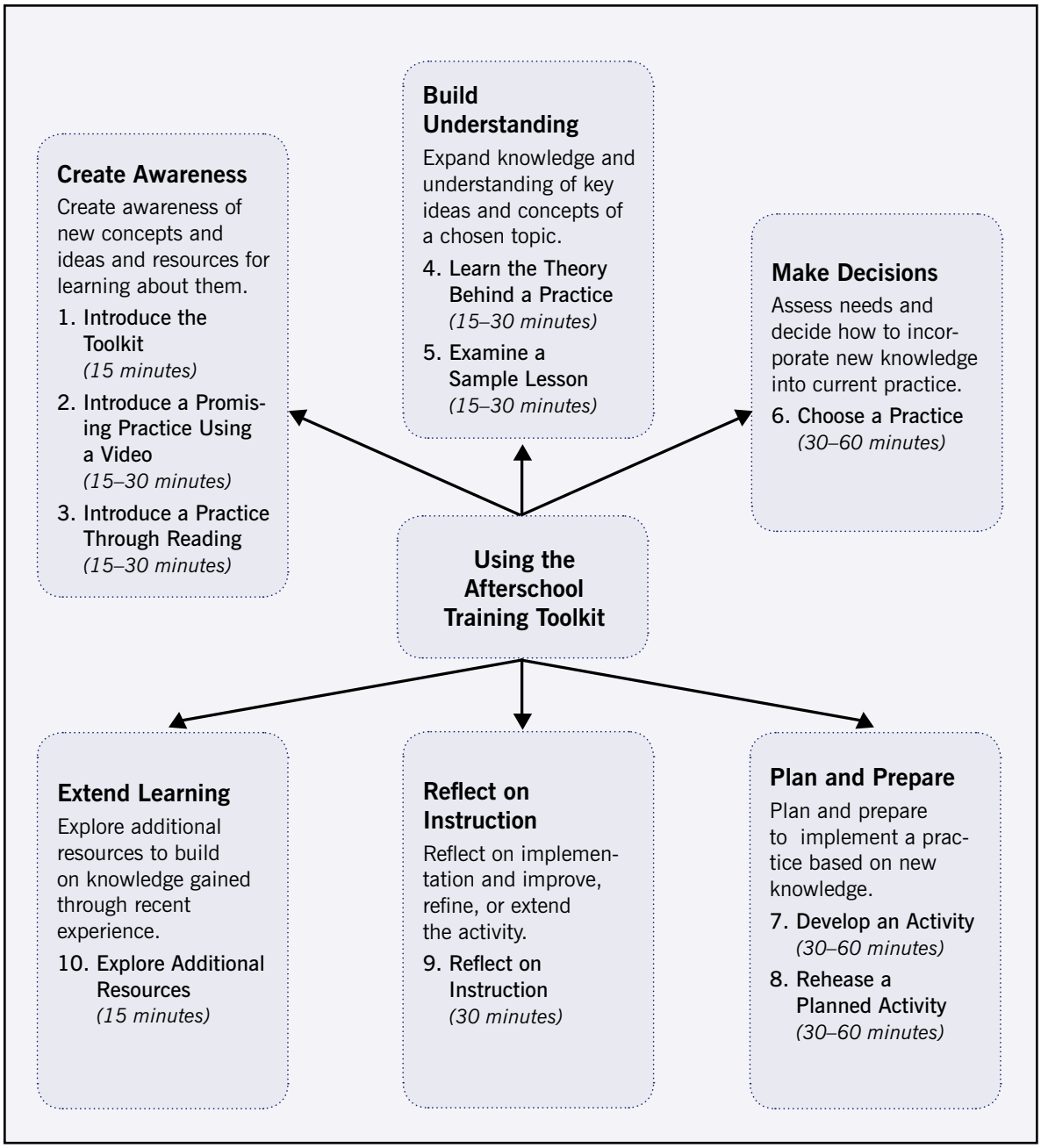
Phase 6: Extend Learning

Goal: Explore additional resources to build on knowledge gained through recent experience.

Strategy 10: Explore Additional Resources — 15 MINUTES

- Have staff consider additional resources that will extend and improve their activities.
- Look at the "Resources" tab on the practice page and think about ways to extend staff knowledge about the practice they have implemented. Invite them to create variations of the activity or a new activity based on other examples they may find.
- Have staff work in pairs or as a group to review standards related to the given content area and have them think again about how the practice promotes skills related to expectations for students.
- Allow staff to learn more about the content area using the "Resources" tab.
- Ask staff to make suggestions on what other practices would complement and support what they have already begun.
- Direct your afterschool staff to the Afterschool Lesson Plan Database and the Curriculum Resource Guides (see www.sedl.org/afterschool or page 2 of this book for more information.)

Handout A: 10 Ways to Use the Afterschool Training Toolkit



Handout B: Video Viewing Guide

What skills and concepts were the focus of the activity?

What strategies did you notice being used

- to engage students?
- to group students?
- to integrate multiple content areas?
- to manage student behavior?
- to manage the technology?

How does this video help you understand the promising practice you are studying?

Based on what you observed in the video, do you have comments or questions about this practice?

How is the activity in the video similar to or different from your current technology practice?

What ideas can you take away from this video to use in your own program?

Handout C: Scenarios Activity

Introducing the Toolkit Practices Through Reading

Make copies of the following scenarios for staff. Hand out one scenario per person or small group. Ask staff to read their scenario and answer the accompanying questions. Then have staff present and discuss their scenarios with the group.

Scenario 1

Julie brought her pet gecko, Buddy, to a special show-and-tell afterschool session. Her classmates were excited and wanted to touch and hold it. The instructor was concerned that too much attention to the gecko would harm it, so she gathered the students together to discuss and create some rules for taking care of Buddy. The instructor wrote down the students' suggestions on chart paper. Once that was done, she divided the students into three small groups. One group conducted research on geckos. Another group talked about taking pictures of Buddy. The third group considered writing adventure stories about Buddy and sharing them with other children.

Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Handout C: continued

Scenario 2

Children in the afterschool program want to create personal and original stories with simple technology tools. They first read and listen to stories about children from other cultures and circumstances. Then they discuss stories they would like to tell about themselves, a place or event in their community, or their school. Once the students decide on their focus, they work in pairs or small groups to develop their part of the story. They want to include some photos to help tell their story. They also want to include music and their own voices in the telling of the story.

Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Scenario 3

The instructor elaborates on the topic of wildlife migration by telling students that in the fall millions of monarch butterflies fly across North America and head south to reach sanctuary trees in a remote location in Mexico. In the spring, the instructor says, they leave Mexico and head back to their original home. The instructor goes on to explain how the activity of tracking butterflies can be carried out as a project with other students across North America. "When the next migration begins, we'll take a closer look at the monarchs' winter habitat and how butterflies are adapted to survive there," the teacher says. "We'll track their migration path across North America with other students." The students will register for the activity through a Web site called Journey North.

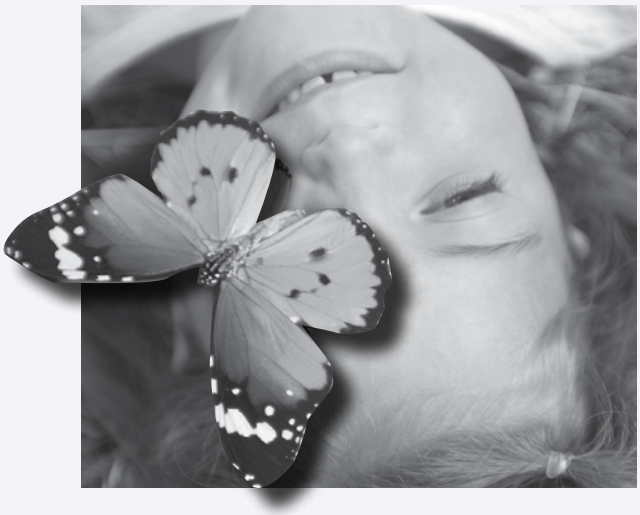
Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.



Handout C: continued

Scenario 4

"I wonder who has the biggest smile," asks an afterschool instructor. Soon, 15 fifth-grade students are literally grinning from ear to ear, all eager to prove that they have the biggest smile. Some students show their teeth in wide grins. Others simply show broad smiles and raise their eyebrows in efforts to make their smiles even bigger. "I'm smiling so much my face hurts!" says one girl. After the students have finished their "smile-off," the instructor shows them how to use yarn and rulers to measure their smiles. The students record their measurements in an electronic spreadsheet. They analyze the data to determine who has the biggest smile and the group's average smile size. They also document their findings with digital pictures they've taken of each other.

Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Scenario 5

A group of eighth-grade students gather with their afterschool instructor at a neighborhood park. With the help of handheld global positioning system (GPS) units, they are creating a Frisbee golf course. Each group selects a tee and uses the GPS unit to plot the longitude and latitude. The groups place a plastic basket to serve as the first "hole" 25 meters away and again plot the exact longitude and latitude. They repeat the process until they have created an entire Frisbee golf course. The students then take turns playing a round of Frisbee golf on each group's golf course. They use their GPS units to plot the exact latitude and longitude of the place where each shot lands, determining who is the closest to the hole. The students keep score by calculating who has taken the most shots and thrown the longest distance. They return to their afterschool program to plot the scores on electronic spreadsheets and create graphs to see who has the lowest score.

Discuss this scenario in your group and then answer these questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Handout C: continued

Scenario 6

In Springfield, Illinois, teens in an afterschool program accompany archaeologists on a local dig. Along with shovels and sifters, they use global positioning system technology to locate, excavate, and study the geological history of their community.

In Old Minto, Alaska, American Indian teens work with tribal elders and local scientists to map the natural history of their community. They combine such cutting-edge technology as satellite imagery with traditional knowledge to record local geological data on digital maps showing ancient trails, traditional tribal sites, and significant geological features.

Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Scenario 7

Afterschool students go on a safari, look at paintings at the Louvre, or swim with sharks. These adventures may sound impossible, but with the help of the Internet, students can have such experiences virtually. Imagine the excitement of your students when they interact through videoconferencing, e-mail, or blogs with other students enjoying the same adventures, as well as the guides who link them to the actual place or event.

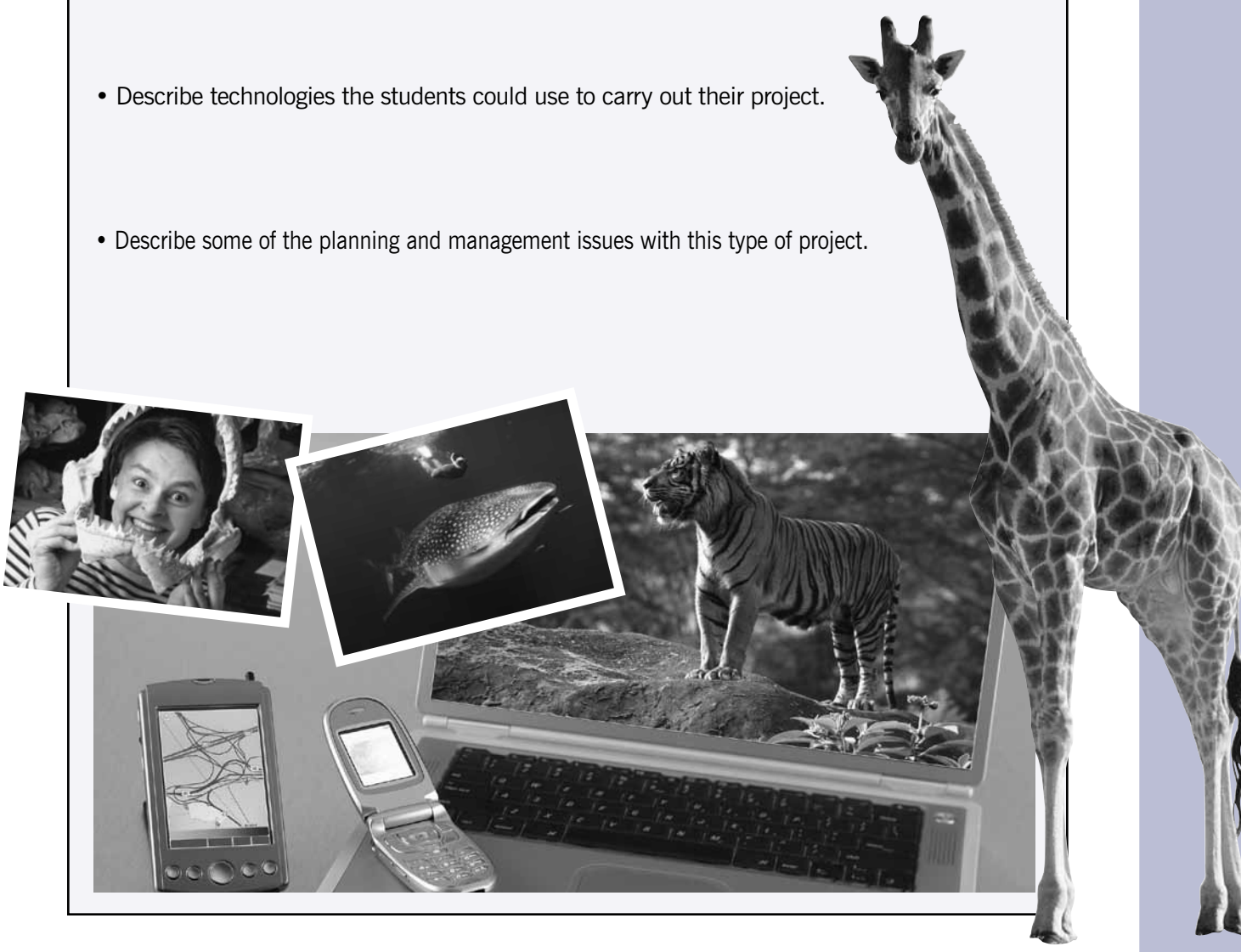
Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.



Handout C: continued

Scenario 8

It's homework time in the afterschool program. As students get out their books and notebooks, two eighth-grade boys gather at a computer to get help with their math homework. They are struggling with a geometry problem on perimeter. After logging on to a math-mentoring Web site, they search the forum archives for questions and answers about perimeter. They find some messages that help them solve most of their problems but remain stumped on two questions. They post questions to the online math expert and log on the next day to see what responses they have received.

Discuss this scenario in your group and then answer the following questions:

- Which of the six technology practices could this be?

- Describe the kinds of learning it promotes.

- Describe technologies the students could use to carry out their project.

- Describe some of the planning and management issues with this type of project.

Handout D: Promising Practices in Technology

Practice One

Developing Self-Expression and Creativity

In this practice, students use technology to work collaboratively on projects, products, publications, or other creative works. Activities are commonly theme-based and integrate knowledge and skills from multiple content areas. This practice helps students develop self-expression and self-management skills. The instructor serves as a collaborator to facilitate the process for completing the project.

Practice Two

Gathering and Sharing Information

As the name suggests, this practice focuses on using technology to collaborate, communicate, and gather and exchange information for investigative and research projects in math, science, literacy, and the arts. When using these tools, students learn new skills as well as safe and correct uses of digital information. Students help with the choice and direction of projects.

Practice Three

Finding and Solving Problems

This practice uses technology in the process of finding and solving problems. The instructor guides the students with skillful questioning to identify a problem that both interests them and draws on their prior experience and knowledge. The community provides an excellent source for identifying problems and also serves as an opportunity for service-learning activities.

Practice Four

Living and Working With Technology

In this practice, students learn about technology they will encounter in the workforce and in the everyday world around them to encourage them to consider careers requiring technology knowledge and skills. Students have the opportunity to connect with business and other organizations in the community.

Practice Five

Learning in Virtual Spaces

This practice focuses on activities that use electronic tools such as the World Wide Web, e-mail, or videoconferencing to deliver virtual learning opportunities across geographic boundaries. It provides instruction and collaboration for students who cannot meet face-to-face. Technology enables students with special needs to participate in activities that

Handout D: continued

might not otherwise be available to them. This practice shows why the Internet has been described as a living, ever-changing resource for learning.

Practice Six

Building Skills and Understanding

The goal of this practice is to challenge students through educational computer games, puzzles, electronic books, and other forms of programmed instruction such as tutorials and integrated learning systems. Students learn "from" the computer in this practice, and learning can vary according to content area or purpose. This practice can directly or indirectly support learning objectives in the afterschool setting for even the youngest students.

Handout E: Getting Started: Considerations for Activity Planning

Whether you consider yourself tech-savvy or technophobic, you can find a variety of ways to integrate technology tools and skills into your afterschool program and implement the practices in this toolkit. Here are some things to consider when planning any technology-enriched activity:

Grades

- What grade levels are you working with?

- What are age-appropriate activities for these grade levels that will engage students and incorporate their interests?

Content

- What is the learning that will take place?

- How does it connect to and support your students' day-school curriculum in language arts, math, science, the arts, or a combination of these content areas?

Technology

- What technology skills do your instructors and students already have?

- What skills would instructors and students like to learn?

- What kind of technology equipment do you have access to or can you acquire?

- Whom can you count on for technical help, training, or assistance?

Handout E: continued

Time

- How much time will it take to plan, set up, and implement the activity?

Ease of Implementation

- How much training and equipment is needed to implement the activity?

- How will you manage the technology and the students interacting with the technology?

- What is your back-up plan if you encounter technical problems (e.g., a Web site is down, the CD-ROM drive gets stuck, etc.)?

Handout F: Lesson Planning Template

Date:
Name:
School:
Title of Lesson:
Grade Levels:
Duration:
Learning Goals:
Materials Needed:
Preparation:
What to Do:
Outcomes to Look for:
Self-Evaluation (after conducting the activity):
Notes:

Handout G: Post-Activity Reflection

The questions below are prompts to help you record your ideas, but you can also write additional observations about this activity.

Preparation

- How well did the preparation help you carry out the activity with your students?

- What can you do to feel more prepared?

Engagement

- What was the level of participant engagement?

- What did you notice about engagement during the different parts of the activity?

- How satisfied were you with the level of engagement? How could you increase student involvement?

Academic Enrichment

- How would this lesson support other academic content areas?

- What changes could you make to strengthen academic enrichment while still keeping the activity fun?

Classroom Management

- What strategies did you use to make the lesson go smoothly?

- What problems did you encounter?

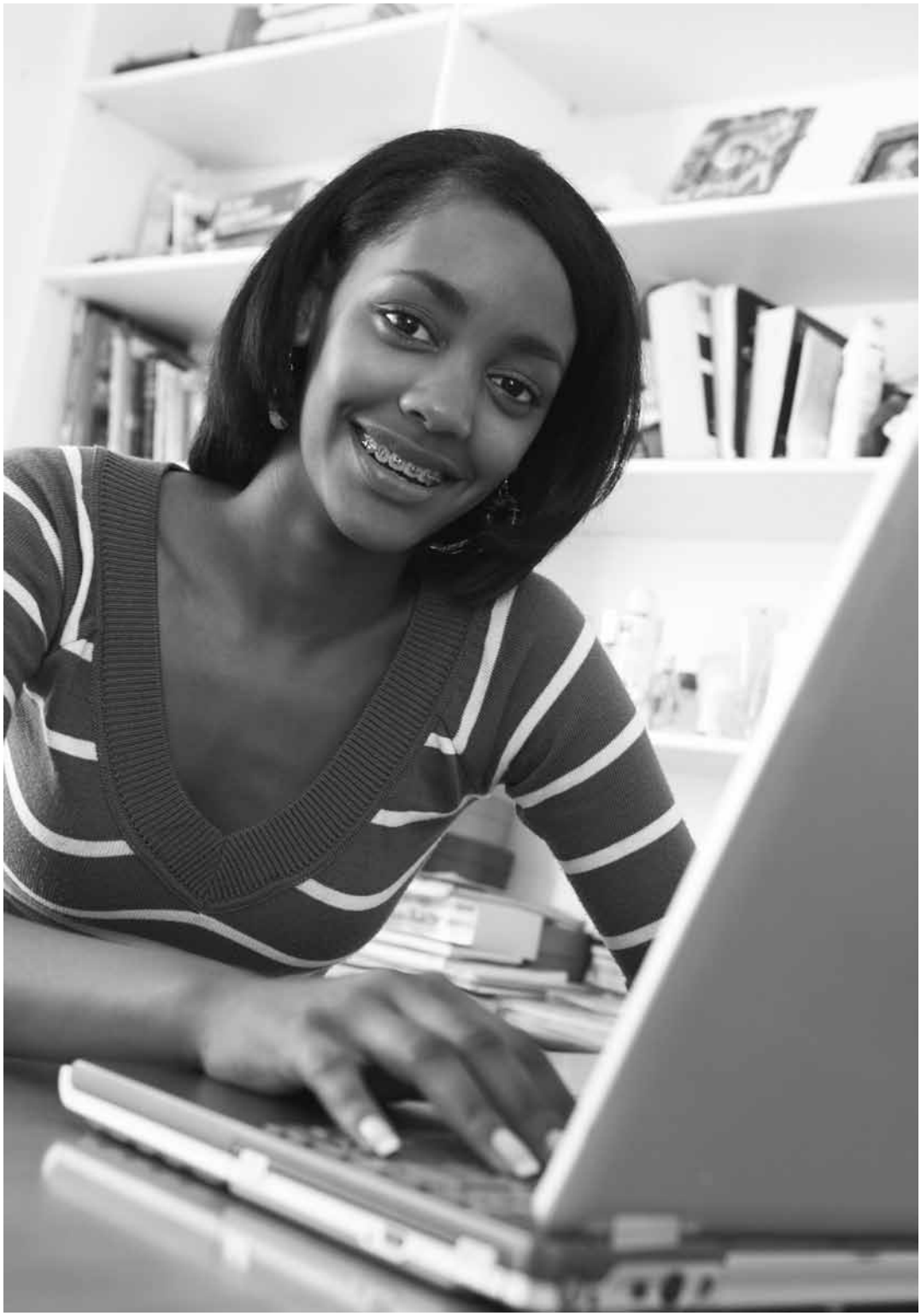
- What changes would you make?

Technology Management

- What strategies did you use to ensure that you did not have any problems with the technology you used?

- What problems did you encounter?

- What changes would you make?



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Acknowledgments

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The content of the Afterschool Training Toolkit is based on more than 4 years of research and observations at 53 afterschool programs with evaluation data suggesting an impact on student learning. The content also draws from a review of relevant research studies and the experience and wisdom that each of the developers brought to the project. The collective experience of the developers includes afterschool programming, professional development, educational research, program development, program management, and direct instructional experience with students.

The developers believe that these practices and materials will help afterschool leaders and educators create high-quality programs that will motivate, engage, and inspire students' learning and participation.

We extend our appreciation to our site schools and thank the parents of the children in these classrooms for allowing us to showcase their children at work in the toolkit videos.

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U.S. DEPARTMENT OF EDUCATION

Technical Assistance and Professional Development for
21st Century Community Learning Centers

This guide to the Afterschool Training Toolkit was created with the support of the U.S. Department of Education for the use of 21st Century Community Learning Centers. Used with the online Afterschool Training Toolkit, this guide will give you the resources you need to lead professional development activities that will teach your staff to build fun, innovative, and academically enriching activities that not only engage students but also extend their knowledge in new ways and increase academic achievement.

NATIONAL PARTNERSHIP FOR
QUALITY AFTERSCHOOL LEARNING

Advancing Research, Improving Education