"The E-Rate in America" (February 2000) was one of the earliest efforts to assess the impact of the then-new federal program. In this second phase of the study, the Benton Foundation and the Center for Children and Technology continue to investigate the E-Rate while developing new tools to assist teachers, administrators, and policymakers in meeting some of the challenges discovered in the first phase of research. The Evaluation Toolkit presented in this document is part of this second phase of work, and is a work-in-progress. The Toolkit is designed to aid teachers in assessing the impact of technology-rich activities on skills development, student learning, and media literacy. This product builds upon the national ISTE (International Society for Technology in Education), state, and local standards for general technology use by helping teachers determine how specific types of technology tools can be useful for promoting certain skills. The Toolkit currently focuses on five core areas of technology use commonly encountered in classrooms: Internet research; data collection and representation; live presentations; Web design; and illustrated reports. The Toolkit addresses the unique learning opportunities that each of these forms of technology use can bring to the classroom by first grouping the skills students must master within four categories: digital skills; media and meaning; point of view; and audience. Within these categories, the Toolkit gives teachers a sense of how student work might look at the beginning, intermediate, and advanced stages. Finally, the Toolkit moves from describing broad areas of skill and understanding to providing lists of specific skills that teachers might build into technology-rich lesson planning. The four pieces of the Toolkit (the Technology Affordances Matrix, the Conceptual Frameworks, the Checklists and the Evaluation Sample) are designed to work together to guide teachers through the process of planning, implementing, and evaluating technology-based lessons. (AEF)
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BACKGROUND ON THE EVALUATION TOOLKIT

The Benton Foundation and EDC's Center for Children and Technology (CCT) have been funded by the Joyce Foundation to conduct a series of studies about the E-Rate, a federally managed program that provides significant discounts on telecommunications technologies to schools and libraries in the United States. Specifically, Benton and CCT have been studying the impact of the E-Rate on U.S. districts and schools.

The first study, The E-Rate in America (www.benton.org/e-rate/e-rate.4cities.pdf) (published in February 2000), was one of the earliest efforts to assess the impact of the then-new federal program. It traced the ideas and political battles that led to the E-Rate's establishment and recounted the practical issues confronting school districts as they sought to benefit from E-Rate resources. We found that although E-Rate funding opened up access to new network resources at the classroom level, it also raised many new challenges for educators by creating the need for revised curricula, improved in-school communication, and new kinds of technical support and professional development for teachers.

In the second phase of work, the Benton Foundation and CCT have continued to investigate the E-Rate while developing new tools to assist teachers, administrators, and policymakers in meeting some of the challenges discovered in the first phase of research. The Evaluation Toolkit presented here is part of this second phase of work, and is a work-in-progress. The Toolkit is intended to help policymakers, administrators, and teachers determine how specific types of technology tools can be useful for promoting certain skills.
The Evaluation Toolkit, currently being developed in collaboration with teachers and administrators in Chicago and Milwaukee, is designed to aid teachers in assessing the impact of technology-rich activities on skills development, student learning and media literacy. This product builds upon the national ISTE (International Society for Technology in Education), state, and local standards for general technology use by helping teachers determine how specific types of technology tools can be useful for promoting certain skills.

The Toolkit will help teachers and administrators determine what level of sophistication students have attained in their technology use, will give teachers strategies to define clear learning objectives for technology-related lesson planning and will provide concrete examples of how students might attain these objectives in their work.

The Toolkit currently focuses on five core areas of technology use commonly encountered in classrooms:

- Internet Research
- Data Collection and Representation (i.e. spreadsheets and graphing tools)
- Live Presentations
- Web Design
- Illustrated Reports

The Toolkit addresses the particular affordances (unique learning opportunities) that each of these forms of technology use can bring to the classroom by first grouping the skills students must master within four categories:

**Digital Skills:** The student can execute the mechanics of technology use.

**Media and Meaning:** The student can both convey ideas in the various forms made available by technology and decide which form best delivers her message.

**Point of View:** The student can make decisions about media – including decisions about text, visuals, sound effects and overall presentation format – that are directed by the opinions she intends to express in her work.

**Audience:** The student considers which media would most effectively and compellingly convey her message to particular audiences.

Within these categories of skill, the Toolkit gives teachers a sense of how student work might look at the Beginning, Intermediate and Advanced stages.

Finally, the Toolkit moves from describing broad areas of skill and understanding to providing lists of specific skills which teachers might build into technology-rich lesson planning.

The four pieces of the Toolkit (the Technology Affordances Matrix, the Conceptual Frameworks, the Checklists and the Evaluation Sample, as described in more detail in the section, "How the Toolkit Will Be Used") are designed to work together to guide teachers through the process of planning, implementing and evaluating technology-based lessons.
HOW THE TOOLKIT WILL BE USED

The four pieces of the Toolkit are the Technology Affordances Matrix, the Conceptual Frameworks, the Checklists and the Evaluation Sample. All of these tools are designed to aid educators in (1) determining students’ current level of facility with technology, (2) designing technology-rich lessons with concrete objectives and student learning goals in mind and (3) assessing student work with technology. Each tool serves a different stage in this process, as described below.

I. The Technology Affordances Matrix: Entry point to the rest of the Toolkit. The Matrix will list the most common forms of student work with technology - Web Design, Data Collection and Representation, Information Gathering, Live Presentations and Illustrated Reports - and will also broadly introduce the learning opportunities that each area of technology use can afford to students. At this point, educators can begin to consider which form of technology work would best promote their larger learning goals for students.

II. Conceptual Frameworks: Diagnostic tools. For each type of work described in the Technology Affordances Matrix (e.g. Live Presentations or Internet Research), the Conceptual Frameworks will divide the four skill areas of Digital Skill, Media and Meaning, Point of View and Audience (see Description of the Toolkit for definitions of these skill areas) into Basic, Intermediate, and Advanced skills and provide essential descriptions of each skill level. Teachers will be able to use the Frameworks as roadmaps to determine students’ levels of technology use, and focus upon the kinds of skills the students must learn to become more sophisticated users. In other words, teachers will be able to use the Frameworks to understand the trajectory of skill in each particular skill area for each type of student work with technology.

III. Checklists: The “meat” of the toolkit. While the Conceptual Frameworks will provide general descriptions of skill areas, the Checklists will give teachers concrete descriptions of specific skills for students to learn. For example, where the Media and Meaning affordance in the Framework says broadly that an Advanced live presentation would be one in which, “different forms of representation are used to highlight different aspects of the information,” the Checklists will direct teachers to look at specific components of a live presentation. The Checklists are flexible tools; teachers can pull from the Checklists when planning lessons or when designing rubrics to assess student work.

IV. Evaluation Sample: How the Toolkit can be used with student work. While the Checklist provides teachers with specific skills that students should learn, the Evaluation Sample gives teachers a model of how to apply the Checklist to a piece of student work. The student example is accompanied by a marked checklist that outlines the areas that the student has mastered while also providing indications of where the student work needs improvement.
### A PATH THROUGH THE EVALUATION TOOLKIT

#### TECHNOLOGY AFFORDANCE MATRIX: ALL TYPES OF DIGITAL WORK

<table>
<thead>
<tr>
<th>Digital Skills</th>
<th>Media &amp; Meaning</th>
<th>Point of View</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students position and format information to fit onto slides.</td>
<td>Students can import and link to material from external sources.</td>
<td>Students can work with digital information that comes in different formats.</td>
<td>Students use all elements of production and software tools.</td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students use text, visuals and sound to clarify and elaborate on main ideas.</td>
<td>Students use text, visuals and sound to clarify and elaborate on main ideas.</td>
<td>Students use different forms of representation to highlight different aspects of the information.</td>
<td>Students create a slide show that is elaborate in transition and presentation.</td>
</tr>
<tr>
<td><strong>Advanced</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students use different media to make their messages clear and appealing to particular audiences.</td>
<td>Students use different media to make their messages clear and appealing to particular audiences.</td>
<td>Students use different media to make their messages clear and appealing to particular audiences.</td>
<td>Students use different media to make their messages clear and appealing to particular audiences.</td>
</tr>
</tbody>
</table>

**Diagram:**

- **Digital Skills**
  - Creating .ppt or Powerpoint slides to accompany live narration.
  - Knowing how to bring text or illustrations from the Internet or clip art, knowing how to use digital cameras and incorporate footage into the presentation (where applicable).

- **Media & Meaning**
  - Using visual aids (e.g., tables, charts, graphs) to enhance message of report.
  - Understanding what visual and oral components of presentations can be different but complementary to other "visual" and audio components, and increase the strength of the presentation, rather than repeat each other.

- **Point of View**
  - Understanding how different features of presentations (e.g., transitions, effects, illustrations) can be used to convey the student's point of view and highlight underlying assumptions (e.g., using a home sound for a report about NYC, rather than a machine gun sound).

- **Audience**
  - Understanding the need to take the audience into account when choosing which visual aid to highlight key points. Being able to ask questions by incorporating slides (e.g., one would not use the same visual aid for a report devoted to 12th grade art as one would use for a report delivered to kindergartners).
TEACHER COMMENTS

THE STUDENTS WERE ABLE TO:
- Import pictures from the Internet.
- Place text in different locations on the slide (title and body).
- Use text in appropriate format (title and body).
- Choose a background template.
- Insert desired sound, transition, and animation effects.
- Format text (e.g., changing font size, changing color of text).

STUDENTS STILL NEED HELP WITH:
- Advancing to the Intermediate and Advanced levels.

IV. EVALUATION SAMPLE: LIVE PRESENTATION

CHECKLIST: DIGITAL SKILLS

CHECKLIST: MEDIA & MEANING

CHECKLIST: POINT OF VIEW

CHECKLIST: AUDIENCE

III. CHECKLISTS: LIVE PRESENTATIONS
<table>
<thead>
<tr>
<th>Live Presentations</th>
<th>Digital Skill</th>
<th>Media &amp; Meaning</th>
<th>Point of View</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating KidPix or PowerPoint slides to accompany live narration. Knowing how to bring text or illustrations from the Internet or clip art. Knowing how to use digital cameras and incorporate footage into the presentation (where applicable).</td>
<td>Creating KidPix or PowerPoint slides to accompany live narration. Using visual aids (e.g., slides) and ordering them to enhance message of report. Understanding that visual and oral components of presentations can be different but complementary to one another, and increase the strength of a presentation, rather than repeat each other.</td>
<td>Understanding how different features of presentations (e.g., transitions, effects, illustrations) can be used to convey the student's point of view and highlight underlying messages (e.g., using a horn sound for a report about NYC, rather than a machine-gun sound).</td>
<td>Understanding the need to take the audience into account when choosing effects to highlight points. Being able to field questions by interpreting slides. (e.g., one would not use the same visual aids for a report on music to teenagers as one would to adults).</td>
<td></td>
</tr>
<tr>
<td>Illustrated Reports</td>
<td>Downloading and printing or copy/pasting illustrative material for inclusion in text documents.</td>
<td>Using non-text elements in a way that exceeds a decorative purpose. Understanding that different media types (e.g., text, photos, sound, illustrations, etc.) have unique benefits and limitations (i.e., being able to use sound or pictures to add information or to clarify or comment on key points).</td>
<td>Understanding how media choices do not merely illustrate content, but can also convey the author's specific point of view or message (e.g., showing a striking, rather than resting, cobra in a report on snakes).</td>
<td>Understanding that if illustrations are to enhance the content of a report, they must be chosen with the audience in mind (e.g., one would not use the same visual aids for a report delivered to 12th graders as one would use for a report delivered to kindergartners).</td>
</tr>
<tr>
<td>Nonlinear Productions (web pages)</td>
<td>Creating stand-alone web pages with text, images and navigation buttons.</td>
<td>Understanding that information can be presented in a nonlinear fashion. Using a combination of text, visuals and sound to convey meaning, and utilizing nonlinear navigation to organize the flow of information.</td>
<td>Understanding how different points of view can be included in the same nonlinear text (e.g., a home screen that presents a single question about the value of free trade that links to multiple pages that present arguments for and against).</td>
<td>Understanding how nonlinear information can provide opportunities for diverse audiences to pursue their individual interests within a single document. Understanding that web pages offer opportunities for audience interaction through links, discussion boards, online surveys, etc.</td>
</tr>
<tr>
<td><strong>Information Gathering</strong></td>
<td><strong>Digital Skill</strong></td>
<td>Locating and downloading or copy/pasting information from Internet or CD-Rom.</td>
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<td>--------------------------</td>
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<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Media &amp; Meaning</strong></td>
<td></td>
<td>Understanding that non-text media forms (e.g., pictures or sound) can not only illustrate the text, but can also carry information of their own.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Point of View</strong></td>
<td></td>
<td>Understanding that information is never completely neutral but always framed by the author/source’s point of view.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td></td>
<td>Understanding that authors tailor their uses of different media types to reach a certain audience (e.g., a political cartoon in the New York Times is crafted to communicate to a very different audience than a photo montage in a skateboarding magazine).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data Representation</strong></td>
<td></td>
<td>Using spreadsheet software (e.g., Excel) to organize data and create charts, graphs and tables.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Understanding which data should be represented visually (e.g., number of students in a school might be graphed, or the demographics of a number of students in each grade might be).</td>
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<tr>
<td></td>
<td></td>
<td>Understanding that particular types of data are best represented by particular types of graphs/charts (e.g., pie chart versus bar graph), and that choices about graphical representation can impact a viewer’s comprehension of data and findings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Knowing how to vary the ways one represents data to sway or convince a particular audience (e.g., to emphasize the increasing number of bicycle accidents over a five-year period, data is better represented in a bar or line graph than in a pie chart).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TECHNOLOGY AFFORDANCES MATRIX:** *Entry point to the rest of the Toolkit.* The Matrix will list the most common forms of student work with technology - Web Design, Data Collection and Representation, Information Gathering, Live Presentations, and Illustrated Reports - and also broadly introduce the learning opportunities that each area of technology use can afford to students.
## II. LIVE PRESENTATIONS CONCEPTUAL FRAMEWORK

<table>
<thead>
<tr>
<th>Digital Skills</th>
<th>Basic</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students position and format information to fit onto slides.</td>
<td>Students can import and link to material from external sources.</td>
<td>Students can work with digital information that comes in different formats.</td>
<td>Students use all elements of production and software tools.</td>
</tr>
<tr>
<td>Media and Meaning</td>
<td>Students use text and illustrations that make sense together.</td>
<td>Students use text, visuals and sound to clarify and elaborate on main idea.</td>
<td>Students use different forms of representation to highlight different aspects of the information.</td>
</tr>
<tr>
<td>Point of View</td>
<td>Students decide what to show / what is important.</td>
<td>Students use a layout / format that emphasizes the ideas they think are important.</td>
<td>Students’ style or aesthetics are used to persuasively or effectively convey a point of view.</td>
</tr>
<tr>
<td>Audience</td>
<td>Students provide information necessary for a particular audience.</td>
<td>Students choose rhythm / pacing / transitions that appeal to the audience.</td>
<td>Students structure their presentations to allow for audience interaction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students use different media to make their messages clear for particular audiences.</td>
<td>Students use different media to make their messages clear and appealing to particular audiences.</td>
</tr>
</tbody>
</table>

**CONCEPTUAL FRAMEWORKS:** *Diagnostic tools.* For each type of work described in the Technology Affordances Matrix (e.g. Live Presentations or Internet Research), the Conceptual Frameworks will divide the four skill areas of Digital Skill, Media and Meaning, Point of View, and Audience (see Description of the Toolkit for definitions of these skill areas) into Basic, Intermediate, and Advanced skills, and provide essential descriptions of each skill level. Teachers will be able to use the Frameworks as roadmaps to determine students' levels of technology use, and focus upon the kinds of skills the students must learn to become more sophisticated users. In other words, teachers will be able to use the Frameworks to understand the trajectory of skill in each particular skill area for each type of student work with technology.
Checklists: The "meat" of the Toolkit. While the Conceptual Frameworks will provide general descriptions of skill areas, the Checklists will give teachers concrete descriptions of specific skills for students to learn. For example, where the Media and Meaning affordance in the Framework says broadly that an Advanced live presentation would be one in which, "different forms of representation are used to highlight different aspects of the information" the checklists will direct teachers to look at each component of a live presentation. The Checklists are flexible tools; teachers can pull from the Checklists when planning lessons or when designing rubrics to assess student work.

The Checklist is organized by areas of technology sophistication. It outlines four different areas – Digital Skill, Media and Meaning, Point of View, and Audience. The more basic of these areas depend on specific skills and information to achieve proficiency. The more sophisticated areas tend to be goals that build on the basic skills, and are thus less detailed.

A. GETTING INFORMATION INTO A PRESENTATION
   Can students:
   1. □ Basic: Attach pictures made with or provided within the given software (e.g., Clip art in PowerPoint, pictures drawn in Kid Pix)?
   2. □ Basic: Attach pictures from external sources (e.g., other software, CD-ROMs, digital cameras, the Internet)?
   3. □ Intermediate: Scan and import visual material?
   4. □ Intermediate: Import and embed digital video?
   5. □ Intermediate: Import and attach sound files?
   6. □ Intermediate: Embed links to web resources?
   7. □ Intermediate: Import animated material from other software?

B. USING THE MULTIMEDIA CAPABILITIES OF SOFTWARE AND PRODUCTION TOOLS
   Can students:
   1. □ Basic: Use transition effects that come with the software?
   2. □ Basic: Use animation effects that come with the software?
   3. □ Basic: Use sound effects that come with the software?
   4. □ Basic: Use drawing tools that come with the software?
   5. □ Basic: Record sound?
   6. □ Intermediate: Record digital video?
   7. □ Advanced: Create animation effects?

C. POSITIONING MATERIAL ON A SLIDE
   Can students:
   1. □ Basic: Place text in different components on a slide (e.g., title, body, etc.)?
   2. □ Basic: Manipulate text and pictures (cut and paste)?
   3. □ Basic: Align objects in relation to one another (move groups of objects, turn objects, etc.)?

D. FORMATTING MATERIAL IN A PRESENTATION
   Can students:
   1. □ Basic: Choose an appropriate template when creating a new file?
   2. □ Basic: Format text (e.g., change font size, change color of text)?
   3. □ Basic: Manipulate the size of slide elements (e.g., images, title box, text boxes, etc.)?
   4. □ Basic: Format objects and background(s) (e.g., alter color, line, fill effects, etc.)?

E. STRUCTURING THE PRESENTATION
   Can students:
   1. □ Basic: Create multiple slides?
   2. □ Basic: Change the sequence of slides?
   3. □ Basic: Combine slides from multiple files into one slide show?
   4. □ Intermediate: Manipulate the timing of animated transitions?
   5. □ Intermediate: Create custom slide templates?
   6. □ Advanced: Create nonlinear navigational structures for their presentation (e.g., create links within the presentation that allow them to skip to other parts of the presentation)?
III. CHECKLIST: Media and Meaning

A. SPOKEN NARRATIVE
   Can students:
   1. Basic: Accompany the slide presentation with a spoken narrative that elaborates the material in their slides?
   2. Basic: Explain how illustrations relate to information in text (or make it evident in the product)?

B. TEXT
   Can students:
   1. Basic: Write in a style oriented toward presentations, keeping text clear and concise, rather than writing in a report style, in which text is more narrative and elaborate?

C. ILLUSTRATIONS (STILL/MOVING)
   Can students:
   1. Basic: Choose illustrations that support the meaning of the presentation?
   2. Intermediate: Use visuals to supplement, clarify, or elaborate upon information being conveyed in the text?
   3. Advanced: Choose and employ different forms of representation (e.g., data tables, charts) depending upon which form most effectively highlights the information they wish to emphasize?

D. SOUND EFFECTS
   Can students:
   1. Basic: Choose sound effects that support the meaning of the presentation?
   2. Intermediate: Use sound effects to supplement, clarify, or elaborate upon information being conveyed in the text?

E. TRANSITIONS
   Can students:
   1. Basic: Choose animated transitions that support the meaning of the presentation?
   2. Intermediate: Use animated transitions to supplement, clarify or elaborate upon information being conveyed in the text?

F. MIX OF MEDIA
   Can students:
   1. Basic: Combine text, visual, and audio materials that relate to one another?

G. LAYOUT
   Can students:
   1. Basic: Organize text and visual elements of a slide around a coherent idea (e.g., does the order of the slides present sensible narrative)?
   2. Basic: Lay out their slides so that each element is legible to the viewer?
   3. Intermediate: Organize text and visual elements of a single slide around a coherent idea, with each element conveying distinct information (i.e., can the student explain the reasons for the grouping and distribution of information across slides)?

H. DISTRIBUTION OF INFORMATION
   Can students:
   1. Basic: Put slides in an order that creates a sensible narrative or presents a logical sequence of ideas?
   2. Intermediate: Choose how to group and distribute information across slides and explain the reasoning for this distribution?

I. PACING:
   Can students:
   1. Intermediate: Time slide changes, transitions, and animation to match the flow of the spoken narrative?
A. SPOKEN NARRATIVE
   Can students:
   1. □ Basic: Definitively clarify and support their point of view when asked pointed questions about the presentation?

B. TEXT
   Can students:
   1. □ Basic: Explain their choices about what text to include, based on their point of view about the material?
   2. □ Intermediate: Include other viewpoints within their presentation?
   3. □ Advanced: Include a discussion of multiple viewpoints that illustrates their depth of understanding and rationale behind their point of view?

C. ILLUSTRATIONS (STILL/MOVING)
   Can students:
   1. □ Basic: Explain their choices about what illustrations to include, based on their point of view about the material?
   2. □ Intermediate: Select appropriate images to support their interpretations of their content material?
   3. □ Intermediate: Explain how the illustrations they have selected communicate their interpretation?
   4. □ Advanced: Use illustrations to present multiple viewpoints?

D. SOUND EFFECTS
   Can students:
   1. □ Basic: Explain their choices about what sound to include, based on their point of view about the material?
   2. □ Intermediate: Select appropriate sounds to support their interpretations of the content material?
   3. □ Intermediate: Explain how the sounds they have selected communicate their interpretation or perspective?
   4. □ Advanced: Use sound to present multiple viewpoints?

E. TRANSITIONS
   Can students:
   1. □ Basic: Explain their choices about what transitions to include, based on their point of view about the material?

2. □ Intermediate: Select appropriate transitions to support their perspectives on or interpretations of their content material?

3. □ Intermediate: Explain how the transitions they have selected communicate their interpretation or perspective?

4. □ Advanced: Use transitions to present multiple viewpoints?

F. MIX OF MEDIA
   Can students:
   1. □ Intermediate: Combine text, visual, and audio elements to effectively convey their points of view?

G. LAYOUT
   Can students:
   1. □ Basic: Make aesthetic choices about the overall appearance of the presentation?
   2. □ Intermediate: Employ an aesthetic consistently across the presentation?
   3. □ Intermediate: Relate aesthetic choices to the content of their presentation?
   4. □ Intermediate: Use layout to highlight the elements of their presentation they deem important?
   5. □ Advanced: Use elements of style to promote their point of view (e.g., using irony or humor to undercut opposing arguments or austerity to lend authority to assertions)?

H. DISTRIBUTION OF INFORMATION
   Can students:
   1. □ Intermediate: Choose how to group and distribute information across slides to emphasize information that strengthens their points of view?
   2. □ Intermediate: Order their presentation slides in a manner that powerfully presents their points of view?

I. PACING
   Can students:
   1. □ Intermediate: Choose slide changes, pauses, transitions and animation that help convey their points of view more effectively?
III. CHECKLIST: Audience

A. SPOKEN NARRATIVE

Can students:
1. □ Intermediate: Address the audience's questions and incorporate their questions and points of interest into the narrative?
2. □ Advanced: Tailor their presentations to speak directly to a particular audience's perspective?

B. TEXT

Can students:
1. □ Basic: Include verbal information that their audience needs in order to understand the presentation?

C. ILLUSTRATIONS (STILL/MOVING)

Can students:
1. □ Basic: Include visual information that their audience needs in order to understand the presentation?
2. □ Intermediate: Use visuals, sounds and layout to draw connections between content material and the audience's personal experience?
3. □ Advanced: Choose illustrations whose appearance will appeal and be comprehensible to the intended audience (and explain these choices)?

D. SOUND EFFECTS

Can students:
1. □ Intermediate: Use sounds to draw connections between content material and the audience's personal experience?
2. □ Advanced: Choose sound effects with clear meaning that will appeal to a particular audience (and explain these choices)?

E. TRANSITIONS

Can students:
1. □ Advanced: Use rhythm, pacing and transitions that will be appealing and comprehensible to a particular audience (and explain these choices)?

F. MIX OF MEDIA

Can students:
1. □ Advanced: Combine text, visual and audio elements that are particularly effective with their specific audience?

G. LAYOUT

Can students:
1. □ Intermediate: Use layout to draw connections between content material and the audience's personal experience?
2. □ Advanced: Anticipate areas that an audience might want to linger over, and design the structure of the presentation to respond to those concerns (i.e., employ nonlinear navigation structures to respond flexibly to audience questions and comments— to refer back to and elaborate on their slides, to answer questions from the audience, or to help interpret ideas for their audience)?

H. DISTRIBUTION OF INFORMATION

Can students:
1. □ Advanced: Organize information in their slides to foster understanding and speak to the issues of the intended audience (e.g., choose to distribute information across slides that will have the most impact on the intended audience)?

I. PACING

Can students:
1. □ Advanced: Choose slide changes, pauses, transitions, tempo, and animation that will be appealing and comprehensible for their audience?
EVALUATION SAMPLE:
Assessing a Sample Piece of Student Work Using the Evaluation Toolkit

An expedition of a lifetime with Ann Bancroft and Liv Arnesen!
Ann Bancroft and Liv Arnesen started an expedition. They are trying to cross Antarctica. This is a dream come true for them. They have prepared to be the first women to have finished this challenge. They started on November 13, 2000.

The expedition begins
They started on November 13, 2000. They were hoping this trip will be finished in about 100 days, finishing on February 15, 2001.

To prove we’re tough enough!
All the men in the world think they’re tougher than women. Liv Arnesen and Ann Bancroft proved that women are just as tough and that anyone can do the impossible! They have proved that anyone can work hard and achieve their goals.

Surviving a frightening challenge
Bancroft and Arnesen had to suffer a lot. They traveled a distance of 2,400 miles in the blistering cold and wind. The temperature was 30 degrees below, on average, and the wind speed was 32-60km/hr.

In Chicago, the average temperature last winter was 15 degrees.

Note to Reader: In the following pages, we present and evaluate a sample piece of student work. Please note that while we present this work here in black and white, the original sample was created in color; comments on the students’ application of color refer to the original work.
IV. EVALUATION SAMPLE:
Student Slide 1: Digital Skills

Evaluation Sample: How the Toolkit can be used with student work. While the Checklist provides teachers with specific skills that students should learn, the Evaluation Sample gives teachers a model of how to apply the Checklist to a piece of student work. On the right is a slide created by a student and a description of how the slide was presented. On the left is a marked checklist that outlines the areas that the student has mastered. Finally, the right page features a sample teacher evaluation, outlining what the student was able to accomplish and the skills she still needs to work on.

A. GETTING INFORMATION INTO A PRESENTATION

Can students:
1. ☐ Basic: Attach pictures made with or provided within the given software (e.g., Clip art in PowerPoint, pictures drawn in Kid Pix)?
2. ☑ Intermediate: Attach pictures from external sources (e.g., other software, CD-ROMs, digital cameras, the Internet)?
3. ☐ Intermediate: Scan and import visual material?
4. ☐ Intermediate: Import and embed digital video?
5. ☐ Intermediate: Import and attach sound files?
6. ☐ Intermediate: Embed links to web resources?
7. ☑ Intermediate: Import animated material from other software?

B. USING THE MULTIMEDIA CAPABILITIES OF SOFTWARE AND PRODUCTION TOOLS

Can students:
1. ☑ Basic: Use transition effects that come with the software?
2. ☑ Basic: Use animation effects that come with the software?
3. ☑ Basic: Use sound effects that come with the software?
4. ☐ Basic: Use drawing tools that come with the software?
5. ☐ Basic: Record sound?
6. ☐ Intermediate: Record digital video?
7. ☑ Advanced: Create animation effects?

C. POSITIONING MATERIAL ON A SLIDE

Can students:
1. ☑ Basic: Place text in different components on a slide (e.g., title, body, etc.)?
2. ☑ Basic: Manipulate text and pictures (cut and paste)?
3. ☑ Basic: Align objects in relation to one another (move groups of objects, turn objects, etc.)?

D. FORMATTING MATERIAL IN A PRESENTATION

Can students:
1. ☑ Basic: Choose an appropriate template when creating a new file?
2. ☑ Basic: Format text (e.g., change font size, change color of text)?
3. ☐ Basic: Manipulate the size of slide elements (e.g., images, title box, text boxes, etc.)?
4. ☐ Basic: Format objects and background(s) (e.g., alter color, line, fill effects, etc.)?

E. STRUCTURING THE PRESENTATION

Can students:
1. ☑ Basic: Create multiple slides?
2. ☑ Basic: Change the sequence of slides?
3. ☑ Basic: Combine slides from multiple files into one slide show?
4. ☐ Intermediate: Manipulate the timing of animated transitions?
5. ☐ Intermediate: Create custom slide templates?
6. ☑ Advanced: Create nonlinear navigational structures for their presentation (e.g., create links within the presentation that allow them to skip to other parts of the presentation)?
Presentation Effects: In this slide, the text is present with no effect. Then the title appears, accompanied by a "laser" sound effect. Next the left picture "drops in" accompanied by a "flying" sound effect, and the right picture "appears."

STUDENT NARRATIVE:

"Our presentation is about Ann Bancroft and Liv Arnesen. They are the first women to cross Antarctica. This is their dream come true!"

An expedition of a lifetime with Ann Bancroft and Liv Arnesen!

Ann Bancroft and Liv Arnesen started an expedition. They are trying to cross Antarctica. This is a dream come true for them. They have prepared to be the first women to have finished this challenge. They started on November 13, 2000.

TEACHER COMMENTS

THE STUDENTS WERE ABLE TO:
- Import pictures from the Internet.
- Place text in different locations on the slide (title and body).
- Use text in appropriate formats (title and body).
- Choose a background template.
- Insert desired sound, transition, and animation effects.
- Format text (e.g., changing font size, changing color of text).

STUDENTS STILL NEED HELP WITH:
- Advancing to the Intermediate and Advanced levels.
IV. EVALUATION SAMPLE:  
Student Slide 2: Media and Meaning

A. SPOKEN NARRATIVE  
*Can students:*  
1. ✓ Basic: Accompany the slide presentation with a spoken narrative that elaborates the material in their slides?  
2. ✓ Basic: Explain how illustrations relate to information in text (or make it evident in the product)?

B. TEXT  
*Can students:*  
1. ✓ Basic: Write in a style oriented toward presentations, keeping text clear and concise, rather than writing in a report style, in which text is more narrative and elaborate?

C. ILLUSTRATIONS (STILL/MOVING)  
*Can students:*  
1. ✓ Basic: Choose illustrations that support the meaning of the presentation?  
2. ✓ Intermediate: Use visuals to supplement, clarify, or elaborate upon information being conveyed in the text?  
3. □ Advanced: Choose and employ different forms of representation (e.g., data tables, charts) depending upon which form most effectively highlights the information they wish to emphasize?

D. SOUND EFFECTS  
*Can students:*  
1. □ Basic: Choose sound effects that support the meaning of the presentation?  
2. □ Intermediate: Use sound effects to supplement, clarify, or elaborate upon information being conveyed in the text?

E. TRANSITIONS  
*Can students:*  
1. □ Basic: Choose animated transitions that support the meaning of the presentation?  
2. □ Intermediate: Use animated transitions to supplement, clarify or elaborate upon information being conveyed in the text?

F. MIX OF MEDIA  
*Can students:*  
1. ✓ Basic: Combine text, visual, and audio materials that relate to one another?

G. LAYOUT  
*Can students:*  
1. ✓ Basic: Organize text and visual elements of a slide around a coherent idea (e.g., does the order of the slides present sensible narrative)?  
2. ✓ Basic: Lay out their slides so that each element is legible to the viewer?  
3. ✓ Intermediate: Organize text and visual elements of a single slide around a coherent idea, with each element conveying distinct information (i.e., can the student explain the reasons for the grouping and distribution of information across slides)?

H. DISTRIBUTION OF INFORMATION  
*Can students:*  
1. ✓ Basic: Put slides in an order that creates a sensible narrative or presents a logical sequence of ideas?  
2. ✓ Intermediate: Choose how to group and distribute information across slides and explain the reasoning for this distribution?

I. PACING:  
*Can students:*  
1. □ Intermediate: Time slide changes, transitions, and animation to match the flow of the spoken narrative?
**STUDENT SLIDE II:**

**Presentation Effects:** In this slide, first the title and text "appear," then the picture "drops in" very slowly. The picture is accompanied by a "drive-in" sound effect.

**STUDENT NARRATIVE:**

"Ann and Liv started their trip on November 13th, 2000. They wanted to be finished by February 15th, but they actually finished four days earlier, which is pretty cool because they must have gone really fast. This is a picture of when Ann and Liv first arrived: they laid all of their equipment on the snow to make sure they had everything they needed."

---

**The expedition begins**

They started on November 13, 2000. They were hoping this trip will be finished in about 100 days, finishing on February 15, 2001.

---

**TEACHER COMMENTS**

**THE STUDENTS WERE ABLE TO:**

- Distribute information across their slide in a coherent sequence. This slide introduces one strand of the narrative in the sequence: the progress of the expedition.
- Select a theme to present in a single slide — title, text, and picture all contribute to a single coherent point.
- Explain how the chosen photograph conveys information that contributes to the overall message of the slide.

**STUDENTS STILL NEED HELP WITH:**

- Choosing sound effects that facilitate their presentation.
- Using animation effects in ways that do not disrupt the rhythm/timing of their presentation.
IV. EVALUATION SAMPLE:
Student Slide 3: Point of View

A. SPOKEN NARRATIVE

Can students:
1. Basic: Definitively clarify and support their point of view when asked pointed questions about the presentation?

B. TEXT

Can students:
1. Basic: Explain their choices about what text to include, based on their point of view about the material?
2. Intermediate: Include other viewpoints within their presentation?
3. Advanced: Include a discussion of multiple viewpoints that illustrates their depth of understanding and rationale behind their point of view?

C. ILLUSTRATIONS (STILL/MOVING)

Can students:
1. Basic: Explain their choices about what illustrations to include, based on their point of view about the material?
2. Intermediate: Select appropriate images to support their interpretations of their content material?
3. Intermediate: Explain how the illustrations they have selected communicate their interpretation?
4. Advanced: Use illustrations to present multiple viewpoints?

D. SOUND EFFECTS

Can students:
1. Basic: Explain their choices about what sound to include, based on their point of view about the material?
2. Intermediate: Select appropriate sounds to support their interpretations of the content material?
3. Intermediate: Explain how the sounds they have selected communicate their interpretation or perspective?
4. Advanced: Use sound to present multiple viewpoints?

E. TRANSITIONS

Can students:
1. Basic: Explain their choices about what transitions to include, based on their point of view about the material?
2. Intermediate: Select appropriate transitions to support their perspectives on or interpretations of their content material?
3. Intermediate: Explain how the transitions they have selected communicate their interpretation or perspective?
4. Advanced: Use transitions to present multiple viewpoints?

F. MIX OF MEDIA

Can students:
1. Intermediate: Combine text, visual, and audio elements to effectively convey their points of view?

G. LAYOUT

Can students:
1. Basic: Make aesthetic choices about the overall appearance of the presentation?
2. Intermediate: Employ an aesthetic consistently across the presentation?
3. Intermediate: Relate aesthetic choices to the content of their presentation?
4. Intermediate: Use layout to highlight the elements of their presentation they deem important?
5. Advanced: Use elements of style to promote their point of view (e.g., using irony or humor to undercut opposing arguments, or austerity to lend authority to assertions)?

H. DISTRIBUTION OF INFORMATION

Can students:
1. Intermediate: Choose how to group and distribute information across slides to emphasize information that strengthens their points of view?
2. Intermediate: Order their presentation slides in a manner that powerfully presents their points of view?

I. PACING

Can students:
1. Intermediate: Choose slide changes, pauses, transitions, and animation that help convey their points of view more effectively?
**STUDENT SLIDE III:**

**Presentation Effects:** In this slide, first the title and text “appear,” then the picture “drops in” very slowly. The picture is accompanied by a “drive-in” sound effect.

**STUDENT NARRATIVE:**

“All of the other kids picked explorers who were men, like Shackleton or Magellan, but we chose Ann and Liv because they proved that women can be great explorers, too. Just look at how tough they are! They are sooooo tough!”

---

**To prove we’re tough enough!**

All the men in the world think they’re tougher than women. Liv Arnesen and Ann Bancroft proved that women are just as tough and that anyone can do the impossible! They have proved that anyone can work hard and achieve their goals.

---

**TEACHER COMMENTS**

**THE STUDENTS WERE ABLE TO:**

- Use pictures that illustrate their point that Ann and Liv were tough explorers.
- Choose a title that highlights their point.
- Explain how their chosen sound effect conveys their point of view.
- Make aesthetic choices about the overall appearance of the presentation. These choices were demonstrated in the students’ consistent and organized color choices and their appropriate selection of photography throughout.

- Employ an aesthetic consistently across the presentation; the aesthetic format was regular and easy to understand.

**STUDENTS STILL NEED HELP WITH:**

- Including and discussing other perspectives on the subject matter as a means for explaining and strengthening their own point of view.
IV. EVALUATION SAMPLE:
Student Slide 4: Audience

A. SPOKEN NARRATIVE
Can students:
1. Intermediate: Address the audience’s questions and incorporate their questions and points of interest into the narrative?
2. Advanced: Tailor their presentations to speak directly to a particular audience’s perspective?

B. TEXT
Can students:
1. Basic: Include verbal information that their audience needs in order to understand the presentation?

C. ILLUSTRATIONS (STILL/MOVING)
Can students:
1. Basic: Include visual information that their audience needs in order to understand the presentation?
2. Intermediate: Use visuals, sounds, and layout to draw connections between content material and the audience’s personal experience?
3. Advanced: Choose illustrations whose appearance will appeal and be comprehensible to the intended audience (and explain these choices)?

D. SOUND EFFECTS
Can students:
1. Intermediate: Use sounds to draw connections between content material and the audience’s personal experience?
2. Advanced: Choose sound effects whose meaning will be clear and whose effect will appeal to a particular audience (and explain these choices)?

E. TRANSITIONS
Can students:
1. Advanced: Use rhythm, pacing, and transitions that will be appealing and comprehensible to a particular audience (and explain these choices)?

F. MIX OF MEDIA
Can students:
1. Advanced: Combine text, visual, and audio elements that are particularly effective with their specific audience?

G. LAYOUT
Can students:
1. Intermediate: Use layout to draw connections between content material and the audience’s personal experience?
2. Advanced: Anticipate areas that an audience might want to linger over and design the structure of the presentation to respond to those concerns (i.e., employ nonlinear navigation structures to respond flexibly to audience questions and comments— to refer back to and elaborate on their slides, to answer questions from the audience, or to help interpret ideas for their audience)?

H. DISTRIBUTION OF INFORMATION
Can students:
1. Advanced: Organize information in their slides to foster understanding and speak to the issues of the intended audience (e.g., choose to distribute information across slides that will have the most impact on the intended audience)?

I. PACING
Can students:
1. Advanced: Choose slide changes, pauses, transitions, tempo, and animation that will be appealing and comprehensible for their audience?
Presentation Effects: In this slide, the title is present with no effects. Then the Antarctica facts and picture “appear.” Next, the Chicago fact and picture “appear.”

STUDENT NARRATIVE:

“Ann and Liv had to ski across almost 2,400 kilometers of ice and snow on their expedition. It was much colder in Antarctica than it is on a winter day here. The temperature was 30 degrees below zero, on average, and the wind speed was 32-60 km/hr. Think about how cold you felt coming to school every day this winter, but this winter the average temperature in Chicago was 15 degrees — that’s 45 degrees warmer than in Antarctica.”

Surviving a frightening challenge

Bancroft and Arnesen had to suffer a lot. They traveled a distance of 2,400 miles in the blistering cold and wind. The temperature was 30 degrees below, on average, and the wind speed was 32-60 km/hr.

In Chicago, the average temperature last winter was 15 degrees.

THE STUDENTS WERE ABLE TO:

- Create a presentation to which the audience could relate. Compare the weather in Antarctica with the weather in Chicago, and use a picture of student(s) that the audience in a classroom would understand.

- Help make the connection between the information provided in the text and visuals (two pictures in this instance) through their spoken narrative by asking students to compare their own winter weather to Ann and Liv’s experience.

STUDENTS STILL NEED HELP WITH:

- Selecting an image that clearly conveys the contrast they are drawing. The image they selected conveys similarity, rather than difference.

- Illustrating their reference to temperature differences on a map with a picture or a graph that would make the difference between Antarctica and Chicago visible to their classroom audience.
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