People vs. Pigeons

2005

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1. Description of Primary Learners:

   Average-Above Average Reading 3rd Grade Students

   □ Early Learners   □ High Schools
   ✓ Primary Schools  □ Young Adults
   ✓ Upper Elementary □ Adult Learners
   □ Middle Schools  □ Intergenerational

   *Could adapt for any level, materials provided are for elementary

2. Subject/Topical Areas of Inquiry: City/Urban Wildlife

   ✓ Science/Technology   □ Daily Life Skills
   ✓ Social Sciences      □ Business/Economics
   □ Arts/Humanities      ✓ Local Community
   □ Personal Development ✓ Home, Garden, Auto

3. Library Resources/Media Formats Used: Any appropriate print/online

   ✓ Reference Books   ✓ Databases
   ✓ Periodicals       ✓ Collections
   ✓ Web Sites         ✓ Videos, Art Forms
   □ Production Tools  □ Production Equipment
People vs. Pigeons

Program Description: This is a multi-session experience for the elementary student (3rd - 5th grade) that begins by setting a learning context through reading or watching local news stories about conflicts between humans and wildlife (pigeons, geese, moles, etc.). The experience includes the students selecting their animal and researching its conflicts with humans. Then students develop possible solutions to the conflicts that will (preferably) be positive for both the animals and the humans. The experience concludes with students presenting their information regarding the problems and solutions to interested “community” members, during which the students demonstrate proficiency with the real-world application of their knowledge products.

Program Benefits: This program enables learners to develop collaborative research, processing, and presentation skills using a topic that interests them. Past participants have valued the program because it helped them to learn to use library resources more effectively and to express their own thoughts within a defined context related to their school work.

The Roles the Librarian Plays (check all that apply):

- Information Specialist for Primary Learners
- Instructor in Information Literacy/Inquiry Skills for Primary Learners
- Partner to Teachers/Instructors/Subject Experts
- Program Advocate and Administrator
- As much as Librarian and Teacher desire!
### People vs. Pigeons

#### Learning Objectives for Primary Learners

<table>
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<tr>
<th>Learning Dimension</th>
<th>Content Objectives*</th>
<th>Information Literacy Objectives</th>
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</table>
| **Concepts**       | 1—Students will learn to use titles, tables of contents, chapter headings, a glossary, or an index to locate information in text. (LA 3.2.1)  
2—Students will learn to use various reference materials. (LA 3.4.4)  
3—Students will learn to organize ideas chronologically or around major points of information. (LA 3.7.5)  
4—Students will learn to provide a beginning, a middle, and an end to oral presentations, including details that develop a central idea. (LA 3.7.6) | 1—Students will learn to develop keywords in searching online resources (*Internet sources* pre-selected by LMS/teacher).  
2—Students will learn to select useful print resources by using the table of contents/index to find keywords.  
3—Students will learn to evaluate/sort/select information for *relevancy* to specific topic.  
4—Students will learn to write/articulate questions for an expert after conducting initial research.** |
| **Practices**      | 1—Students will demonstrate their ability to use titles, tables of contents, and other text that help to locate information in text.  
2—Students will demonstrate familiarity in using various reference materials in both print and online formats.  
3—Students will display their ideas in a standard organized format.  
4—Students will deliver oral presentations that follow a logical order and focus on a central idea.  
5—Students will include appropriate props to enhance their oral presentations. | 1—Students will demonstrate the ability to use keywords in searching online resources.  
2—Students will select useful print resources from the media center by scanning the table of contents and index for their keywords.  
3—Students will actively choose information based on its relevance to their topic.  
4—Students will develop relevant follow-up questions regarding a topic after conducting initial research. |
| **States of Being**| 1—Students will feel confident in finding information in texts whenever needed.  
2—Students will feel confident in their ability to choose and use various reference materials.  
3—Students will be happy about their ability to organize their ideas in ways that others can understand.  
4—Students will exhibit confidence in their oral presentations because they know how to organize and develop ideas.  
5—Students will be eager to choose and use appropriate props to enhance their oral presentations. | 1—Students will feel confident in using keywords in any future search.  
2—Students will be happy to look for their own print resources by using the table of contents or index.  
3—Students will be eager to use their new skills in choosing relevant information.  
4—Students will exhibit confidence in conversing with adult experts regarding a specific topic. |

*These objectives correlate with established State standards.  
**If outside experts are interviewed by students.
TOOL KIT 1: INSTRUCTIONAL GUIDE

This is a guide for the librarian, teacher, and/or subject expert to follow when replicating the program.

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Prior to Project Implementation

1. **Determine skill level of students.** I did some mini-lessons prior to our project to make sure all the students had some basic skills. These quick reviews covered the following topics and are included in the instructional guide:
   - **Parts of a Book**—Title, Author, Publication Date, Table of Contents, Index, Call Number (emphasizing Fiction, Easy, Nonfiction, Biography, Reference)
   - **Searching the school's IPAC** accurately
   - **Taking Notes**
   - **Citing Sources**
   - **Basic Use of the Computer and Formatting** in a program like MS Word (students had individual laptops)
   - **Basic Internet Navigation**—using the back button and navigating simple Web sites (students had individual laptops)

2. **Gather print resources**—I didn’t have much in my library to begin with, but I was able to purchase numerous titles with grant funding specifically for this project. In the meantime, I gathered resources from the public library and other schools in my district.

3. **Choose online resources**—I found numerous Web sites and tried many of their links to narrow the choices down to what I felt would be the easiest for my students to use. Some states have sites particular to their region, but I found none for Indiana. I placed all the Web sites with their descriptions on a Word document which I saved as a “web page” on our student shared drive so all the students could access it at the same time. A copy of this page, *Online Resources for City Wildlife*, is included. After the project started, I realized that some groups had chosen animals that were not well covered on my original Online Resources document, so I searched for more sites for those specific animals and have included each of those documents, titled *Online Resources for City Wildlife—[Animal]*.

Online databases are another great resource for students. In Indiana, all schools can use the INSPIRE (http://inspire.net) database for free. Take some time to see if the animals your students will be researching are covered well. *Remember—the students are not learning basic facts about the animals, but rather what problems they cause when they live close to humans.*

4. **Assemble learner materials**—I used colored folders with pockets (preferred) and three clasps in the middle to organize each student’s materials. The folders can be any color—having different colors helps both you and the students identify folders quickly later. The first thing in each folder was the Big6 organizer obtained online (see page 19). Then I used cardstock to make three dividers—everyone needs to have three different colors in the same order. Behind the dividers I placed…
   - Divider 1 (color 1)—Journal (5-10 sheets of notebook paper)
   - Divider 2 (color 2)—Works Cited page and Notes (5 sheets of notebook paper)
   - Divider 3 (color 3)—Rubrics
Parts of a Book
1. Pre-select enough books for students to work individually, in pairs, or small groups—whatever will work best for YOUR students.
2. Make sure most, but not all, of the books have these key components (throw in some reference books for example’s sake):
   - Title on Cover and Spine
   - Title Page
   - Author
   - Publication Date
   - Table of Contents
   - Index
   - Glossary
3. Tell all students to find a particular part of the book at the same time. If some students don't have that part, discuss the reasons why with the whole class. Have them find another part, then another, and so on. You may want to have them switch books to keep things interesting.
   - Example: Reference books like encyclopedias often have many authors.
4. Discuss why the publication date is important, especially in the areas of science, health, and technology.

Using the IPAC Accurately
1. Your library has its own catalog—make sure the students know how to use it.
2. Emphasize choosing good sources—for example, Easy and Fiction are usually not helpful when doing research.

Taking Notes
There are many methods for teaching note-taking skills. Use the method taught in your school, or if there is no one method used choose one you feel comfortable using with your students.
1. Select enough books (and encyclopedias) on the same topic so that each pair/group can have one to use.
2. Have students use the Table of Contents/Index to find a specific piece of information in their book. Example: Books about Pigeons (birds); Answer the question “Where do pigeons live?”
3. Have students read their answers aloud. Point out that many of the answers sound the same or very similar. Use the similarities to help the students choose important words for note-taking. Write these words/short phrases where the students can see them—on the board, overhead projector, etc. This is the perfect time to emphasize not plagiarizing.
4. Some books may not have the answer—use the opportunity to reinforce the fact that students will have to look in more than one place to find information.
5. Some books may have different answers—use the opportunity to discuss comparing sources to get accurate information.
6. Before finishing, cite a few of the sources—again emphasize giving credit and not plagiarizing. There is no need to do complete, annotated citations with young children—encourage the principle of citing sources and get them to record at least the basic information like the title, author, and date. If your students are experienced in citing sources, then you may certainly require more.
7. Sample worksheet included—Basic Note Taking and Citation
Basic Use of the Computer
Students should be able to do the following:

- Turn on computer (and monitor)
- Login (if needed)
- Find specific program (MS Word or other word processing program)
- Type—including capital letters at the beginning of a sentence and punctuation marks
- Format—underline, italics, etc.—these skills can be taught as needed
- SAVE in the correct location (for our students, this is their network files, not the computer hard-drive) and save before closing
- Close programs and shut down properly

Basic Internet Navigation Skills
Students should be able to do the following:

- Click on a given link to get to a Web site
  - Having young students do a free Internet search is unwise because they will waste a great deal of time with sites that are not helpful, and they may encounter inappropriate sites.
  - Giving students addresses without links is also frustrating because they make frequent typing errors and therefore have difficulty getting to the approved sites.
- Use the back and forward buttons to navigate a specific page
- Good searching—don’t type in search boxes on the Internet—online databases and encyclopedias are good places to teach keyword searching skills.
During Project Implementation

Scheduling
Our Reading Classes are 90 minutes long, so we scheduled to use the entire 90 minutes so students would not be interrupted during the flow of their work. However, we usually did not work on the project more than one or two days in the same week. You will need to adjust the timeline to fit your schedule.

Timeline

Mini-Lessons—fit in needed lessons before project implementation.

Day 1—Introduce the Problem using movie clips and local newspaper articles regarding conflict between humans and wildlife (such as Canada Geese)

Newspaper Articles
- Indianapolis Star, The (IN) : Geese have many honked off
- Indianapolis Star, The (IN) : Reprimand likely in goose case
- Indianapolis Star, The (IN) : Nipping at cop’s dog no reason to shoot goose
- Indianapolis Star, The (IN) : We made this goose nest, so learn to love it
- Indianapolis Star, The (IN) : Goose eggs laid to waste; 2 women are accused
- Indianapolis Star, The (IN) : 2 won’t be charged in attack on goose eggs and nests

Movie Clips
- Mary Poppins—“Feed the birds” scene
- Any short clip that demonstrates positive or negative interaction between humans and urban wildlife.

--Introduce the research model being used (Big6)

Day 2—Work through Big6, explain THIS project in detail, go over rubrics for group work, etc.

Day 3—Students research online/print

Day 4—Students research online/print

Day 5—Students research online/print; begin working on product (remind students about product rubric)*

Days 6-8—Students make product (remind about rubric) and prepare for presentation (remind about presentation rubric)

Day 9—Student presentations (less than 5 minutes/group)

*The original plan was for students to write a short paper regarding their findings and to make separate visuals for a presentation. This was altered to creating just a poster that could also be used for the presentations.

Special Components

► Journaling will be done at the beginning and end of each session to help students focus and review what they have accomplished and where they need to begin. This is a great way for the teacher and LMS to track the progress of the students and provide instruction/review where needed. Use the questions provided as guides and alter them to fit the instructional needs of your students.

► Research Model—Our school district has adopted the Big6 model for problem solving. Use whatever model is used in your school.

► Instructor Materials—Space for daily journal assignments (chalk/dry erase board, etc), video/news articles (day 1), project folder (day 2), online resources (day 3)
**Day 1**
*Our time was shortened due to testing

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<th>Time (min)</th>
<th>Facilitator</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10/</td>
<td>LMS</td>
<td>Video</td>
<td>Show segments from videos—I chose <em>Mary Poppins</em> “Feed the Birds”</td>
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<tr>
<td></td>
<td></td>
<td>Discuss video</td>
<td></td>
</tr>
<tr>
<td>10-20/</td>
<td>LMS</td>
<td>Newspaper</td>
<td>▶  Read articles aloud and lead class discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>articles</td>
<td>▶  (or make copies of articles and have students read and discuss in groups)</td>
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<td></td>
<td></td>
<td></td>
<td>▶  Ask questions like “What problems are occurring?” “What/Who is causing these problems?” “Are any possible solutions given?”</td>
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<td></td>
<td>▶  Make sure students understand that there is more than one side to the issue—not everything is the animal’s or human’s fault.</td>
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**Day 2**

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<th>Time (min)</th>
<th>Facilitator</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>5-10</td>
<td></td>
<td>Journal</td>
<td>List as many wild animals that might cause problems in [your city] as you can think of (*emphasize local animals).</td>
</tr>
<tr>
<td>10/</td>
<td>LMS</td>
<td>Review</td>
<td>Review newspaper articles from previous lesson. Have students mark their top two animal choices from their journal</td>
</tr>
<tr>
<td>20-25/</td>
<td>LMS</td>
<td>Project</td>
<td>Hand out the project folders. Explain to students that they will use these for all their journaling, note-taking, etc. The following items were placed in the folder:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Folder</td>
<td>Big6 Assignment Organizer—we filled it in together 1&lt;sup&gt;st&lt;/sup&gt; Divider</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Blank Paper—Journal 2&lt;sup&gt;nd&lt;/sup&gt; Divider</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sources Used Page 3&lt;sup&gt;rd&lt;/sup&gt; Divider</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Blank Paper—Notes Collaborative Skills Rubric</td>
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<td></td>
<td></td>
<td></td>
<td>Presentation Rubric *rubrics obtained from <a href="http://rubistar.4teachers.org/index.php">http://rubistar.4teachers.org/index.php</a></td>
</tr>
</tbody>
</table>
### Day 3

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<tr>
<th>Time (min) Facilitator</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>5-10</td>
<td>Journal</td>
<td>1. Which animal (no insects) would you choose to research?</td>
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<tr>
<td></td>
<td></td>
<td>2. Write two specific questions you will need to ask and find answers to in order to understand what the problem is with this animal and how you can solve it.</td>
</tr>
<tr>
<td>5-10/ LMS</td>
<td>Journal II</td>
<td>Share journal answers with whole class</td>
</tr>
<tr>
<td>5-10/ CTeacher</td>
<td>Student Ques.</td>
<td>Answer any student questions; revisit the Collaborative Work Skills rubric.</td>
</tr>
<tr>
<td>15/ LMS</td>
<td>Online Resources</td>
<td>Briefly demonstrate some of the available online resources—point out specific animals that were shared by students.</td>
</tr>
<tr>
<td>15/ CTeacher</td>
<td>Group Work</td>
<td>1. Assign Groups based on animals desired (or have assignments pre-designated and alter the beginning of class journal question).</td>
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<tr>
<td></td>
<td></td>
<td>2. Group—choose questions to research, decide who will look for answers to which questions, discuss what sources would best answer each question.</td>
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<tr>
<td></td>
<td></td>
<td>3. Search for an answer if there is time</td>
</tr>
<tr>
<td>5-10/ LMS</td>
<td>Journal</td>
<td>1. What information did you find today?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Where will you need to start next time?</td>
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<tr>
<td></td>
<td></td>
<td>3. What is one positive thing that happened in your group today?</td>
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<tr>
<td></td>
<td></td>
<td>4. What is one negative thing that happened in your group today?</td>
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<td></td>
<td></td>
<td>*Collect, read, and respond to Journals before next class</td>
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Day 4

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<th>Time (min)</th>
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| 5-10       | Journal      | Look back at your journal entry from [previous day]. Read any comments made by [the teacher/lms]. Answer the following questions:  
1. Why might a book or encyclopedia be a better place than the Internet to find information about your animal?  
2. What problems do you think your animal is causing in the [your city] area? |
| 5-10       | LMS/CT       | Student Ques.                                                                                                                                  |
|            |              | Answer any student questions; revisit any items needed based on journal entries, observation of previous work session.                                                                               |
| 30+        | Group Work   | Let Students Work! I made table signs and placed their journals at their tables each day so they would get in their groups when they arrived to class. While they were working, the adults (LMS, classroom teacher, and parents/other staff members) circulated among the groups to answer questions, facilitate focus and direction, etc.) |
| 10         | Journal      | 1. What information did you find today?  
2. Where will you need to start next time?  
3. What is one positive thing that happened during your research/working with your group today?  
4. What is one negative thing…?  
*questions 3&4 are optional |
| 5          | Clean Up     | Turn in folders, return books to proper locations, shut down computers if needed.                                                                                                                          |
### Day 5

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<th>Time (min) Facilitator</th>
<th>Activity</th>
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| 5-10                   | Journal  | Look back at your journal entry from [previous class]. Read any comments/question that were made by the teacher.  
1. Write at least one sentence responding to the teacher's comments/questions.  
2. [Question addressing common problem or question based on grading of journals] What should be behind the yellow [2nd] divider? Do you have anything there? If so, respond to any comments/questions the teacher wrote. If not, why not? |
| 5-10/ LMS/ CTTeacher   | Student Ques. | Revisit any items needed  
Examples:  
▶ Review each section of the folder (journal vs. notes; sources)  
▶ Review the purpose of the project (Big6 Task Definition)  
▶ Review the collaborative skills rubric |
| 30+                    | Group Work | Let students work! |
| 10                     | Journal   | 1. What information did you find today?  
2. Did you write down your sources? If not, stop now and write them down.  
3. Where, SPECIFICALLY, will you need to start next time?  
4. What are any positive or negative things that happened during your research/working with your group today?  
*optional |
| 5                      | Clean Up  | Turn in folders, put away resources, shut down computers. |
**Day 6**

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<th>Activity</th>
<th>Description</th>
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</table>
| 5-10       | Journal     | Look back at your journal entry from [previous day]. Read any comments that were made by the teacher.  
1. Respond to one of [teacher]’s comments/questions. Write your response as number 1 under today’s date in your journal. [*I was experiencing problems with students not putting dates or numbers for the journal responses, so I became very specific on the questions I asked.*]  
2. Read the Collaborative Work Skills Rubric behind the blue [3rd] divider. Put a **small x** in each square that you think would be your score if you were graded on what you have done up through today. Add up your total. Write your total as number 2 after number 1.  
3. Read the Presentation Rubric while you are waiting for the next instruction. |
| 5          | Journal II  | For #3 (in same journal entry) write one thing you can do better today to improve your score **or** something you could do that you think would help a group member. |
| 30+        | Group Work  | Let students work! |
| 10/ LMS    | Journal     | 1. Have you finished gathering information? If not, what SPECIFIC information do you still need and where, SPECIFICALLY, will you look for it?  
2. Tell me about three pictures, phrases, or other ideas you could place on a poster to share the problems and solutions for your animal with the rest of the class.  
3. What is one positive or negative thing that happened during your research/working with your group today? |
| 5          | Clean Up    | Turn in folders, put away resources, shut down computers |

**Day 7**

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<th>Time (min)</th>
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<th>Description</th>
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</table>
| 10         | Journal     | 1. What questions do you still have left to answer?  
2. What solution(s) have you (your group) found? |
| 10/ LMS/ CTeacher | Instruction | Give basic guidelines for how students should proceed if their group is finished with their research/solutions. We instructed the students to make a sketch of what their poster would look like and bring it to us. Then we would give them individual instructions based on their sketch and give them the materials to make their poster for their presentation. |
| 60+        | Group Work  | Let Students Work! (But monitor them closely) |
| 10         | Journal     | How do you feel about what you and your group accomplished today? |
### Day 8

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<tr>
<th>Time (min) Facilitator</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>5</td>
<td>Group Disc.</td>
<td>Sit with your group. Decide what each of you needs to do to be finished by the end of class today.</td>
</tr>
<tr>
<td>60+</td>
<td>Group Work</td>
<td>1. Finish Poster Board [or other presentation visuals]</td>
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<tr>
<td></td>
<td></td>
<td>2. Include student names and information sources on poster board</td>
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<td>3. Practice your presentation. The format could be something like this:</td>
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<td>Person 1—“Our group chose to research ______. This animal usually lives in _____, but we have found that it also likes to live in _____ (problem area).”</td>
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<td>Person 2—“When this animal lives in _____ (problem area) it causes problems by ______.”</td>
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<td>Person 3—“Sometimes people also cause problems for this animal by ______.”</td>
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<td>Person 1—“We looked at the problems and came up with some solutions. For _____ (problem 1) we suggest _____ (solution 1).”</td>
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<td></td>
<td></td>
<td>Person 2—“Another problem is _____ and the solution we developed is ______.”</td>
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<td></td>
<td>Person 3—State additional problems/solutions or summarize what’s been said; include any unique, interesting facts you learned.</td>
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<tr>
<td>10</td>
<td>Clean Up</td>
<td>Return all supplies for making visual products; turn in folders; return any resources used to correct locations</td>
</tr>
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### Day 9

Group Presentations!
We invited school and district administrators, the students’ parents, and any adults who had helped with the project.

During the presentations, both the LMS and Classroom Teacher used the presentation rubric that had been distributed to students in the beginning to evaluate the presentations. The results were incorporated into each student’s grade, but more importantly, copies of the completed presentation rubric and collaborative work skills rubric were given to the students as a means of feedback.

Last Journal (after group presentations)
1. What is one thing you or your group did really well?
2. What is one thing you or your group could improve if given the chance to present again?

**Wrap Up**
- Return all borrowed print resources
- Make copies of and return all rubrics to students
- Display posters in the school library or other public location
Glossary

**Big6**—Big6 is a model that uses six steps to lead anyone (not just kids) through the decision making or problem solving process. Not all six steps have to be used every time, and they can be repeated as needed. The basic steps are (1) Task Definition, (2) Information Seeking Strategies, (3) Location and Access, (4) Use of Information, (5) Synthesis, and (6) Evaluation. More information can be obtained at [www.big6.com](http://www.big6.com) where there are numerous free online resources as well as print resources available for purchase.

**CTeacher**—Not an official abbreviation in any literature, but simply my way of shortening “Classroom Teacher.” I could have simply stated “teacher,” but since the LMS is also a teacher, I wanted to clearly distinguish between the two.

**Information Literacy**—The ability to find, select, use, and report information as needed. You can find more lengthy definitions and discussions in recent school library journals and publications.

**IPAC**—Internet Patron Access Catalog— a.k.a. Online Patron Access Catalog (OPAC)—a searchable database of a library’s holdings. Patrons access it via a computer—an IPAC can be accessed from any computer with internet access whereas an OPAC may only be accessible from computers within the library’s network.

**LMS**—Library Media Specialist—the school librarian acting as information specialist. 😊

**Rubric**—A format for evaluation work. Best Practices would have the students providing input in the creation of the rubric, however, due to time constraints, student experience, or the scope of a project, this may not always be possible. There are many online resources for creating rubrics. The one used for this project was [http://rubistar.4teachers.org/index.php](http://rubistar.4teachers.org/index.php)
TOOL KIT 2: LEARNERS’ MATERIALS

This is the collection of materials that may be reprinted for distribution to the learners in your program.

TABLE OF CONTENTS
The Learners’ Materials are listed in order of use:

1. Pre-Test 17
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   Big 6 Organizer (Link)
   Rubrics (Link)
4. Sources Used Worksheet (copy front/back) 20
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Inquiry Project
Pre-Project Evaluation

On a scale of 1-4, how well can you do the following tasks?
1—barely or not at all
2—know how, but make frequent errors
3—comfortable, but make occasional errors
4—I’m a pro at this!

_____ Use a computer mouse
_____ Type with both hands
_____ Save my work in a specific file
_____ Change the size of print – like this
_____ Underline or make the print bold
_____ Copy and paste words or pictures

_____ Think of many words that mean the same or similar thing
(example: Write down as many words as you can think of for the “things” people drive on the road)
1 or 2—give yourself a 1; 3 or 4—give yourself a 2; 5—give yourself a 3;
6 or more—give yourself a 4)

_____ Get back to an Internet site that you visited 2 minutes ago without retyping the address
_____ Use the library computers to search for a book in the library
_____ Use the call number to locate a book in the library
_____ Find the author of a book
_____ Find the date a book was published
_____ Find the Table of Contents in a book
_____ Use the index in a book
<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td></td>
</tr>
<tr>
<td>Key Words (Answer)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Call Number</th>
<th>Author (Last Name, First Name)</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
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</thead>
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</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Call Number</th>
<th>Author (Last Name, First Name)</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
</table>

Question

Key Words (Answer)
**Newspaper Articles**
Conduct a search in your city’s newspaper online database. These are the links for recent (2003-2004) articles found in the *Indianapolis Star*. The addresses are too long to include, so you’ll have to use the links or conduct a search.

- [Indianapolis Star, The (IN) : Geese have many honked off](#)
- [Indianapolis Star, The (IN) : Reprimand likely in goose case](#)
- [Indianapolis Star, The (IN) : Nipping at cop’s dog no reason to shoot goose](#)
- [Indianapolis Star, The (IN) : We made this goose nest, so learn to love it](#)
- [Indianapolis Star, The (IN) : Goose eggs laid to waste; 2 women are accused](#)
- [Indianapolis Star, The (IN) : 2 won't be charged in attack on goose eggs and nests](#)

**Big6 Materials**
General information about Big6 can be found online at [www.Big6.com](http://www.Big6.com)
The Big6 organizer that was used with the alpha-project students was created by Barbara A. Jansen and can be found on her school library’s Web page at [http://www.sasaustin.org/library/ResearchPaperOrganizer.htm](http://www.sasaustin.org/library/ResearchPaperOrganizer.htm)

**Rubrics**
Use the rubrics provided or create your own—there are many Web sites that will help you. The site used for this project, which allows you to modify the rubrics online, is [http://rubistar.4teachers.org/index.php](http://rubistar.4teachers.org/index.php)
### Sources Used—Internet

**Example:**


- **Site Title:**
- **Address:** (computer will underline automatically)
- **Date You Used:**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>2.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>3.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>4.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>5.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>6.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>7.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
<tr>
<td>8.</td>
<td>Site Title:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Address:</td>
<td>________________________________</td>
</tr>
<tr>
<td></td>
<td>Date Used:</td>
<td>________________________________</td>
</tr>
</tbody>
</table>
Sources Used—Print (Books, Encyclopedias)

Example:

1. Author: __________________________
   Title: ______________________________
   Date: ______________

2. Author: __________________________
   Title: ______________________________
   Date: ______________

3. Author: __________________________
   Title: ______________________________
   Date: ______________

4. Author: __________________________
   Title: ______________________________
   Date: ______________

5. Author: __________________________
   Title: ______________________________
   Date: ______________

6. Author: __________________________
   Title: ______________________________
   Date: ______________

7. Author: __________________________
   Title: ______________________________
   Date: ______________

8. Author: __________________________
   Title: ______________________________
   Date: ______________
## Collaborative Work Skills: People vs. Pigeons

**Teacher Name:**

**Student Name: ____________________________**  

**Score _____/24**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time-management</strong></td>
<td>Routinely uses time well throughout the project to ensure things get done on time. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.</td>
<td>Usually uses time well throughout the project, but may have procrastinated on one thing. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.</td>
<td>Tends to procrastinate, but always gets things done by the deadlines. Group does not have to adjust deadlines or work responsibilities because of this person's procrastination.</td>
<td>Rarely gets things done by the deadlines AND group has to adjust deadlines or work responsibilities because of this person's inadequate time management.</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td>Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).</td>
<td>Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).</td>
<td>Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).</td>
<td>Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).</td>
</tr>
<tr>
<td><strong>Focus on the task</strong></td>
<td>Consistently stays focused on the task and what needs to be done. Very self-directed.</td>
<td>Focuses on the task and what needs to be done most of the time. Other group members can count on this person.</td>
<td>Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.</td>
<td>Rarely focuses on the task and what needs to be done. Lets others do the work.</td>
</tr>
<tr>
<td><strong>Preparedness</strong></td>
<td>Brings needed materials to class and is always ready to work.</td>
<td>Almost always brings needed materials to class and is ready to work.</td>
<td>Almost always brings needed materials but sometimes needs to settle down and get to work</td>
<td>Often forgets needed materials or is rarely ready to get to work.</td>
</tr>
<tr>
<td><strong>Working with Others</strong></td>
<td>Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.</td>
<td>Usually listens to, shares with, and supports the efforts of others. Does not cause &quot;waves&quot; in the group.</td>
<td>Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.</td>
<td>Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.</td>
</tr>
<tr>
<td><strong>Monitors Group Effectiveness</strong></td>
<td>Routinely monitors the effectiveness of the group, and makes suggestions to make it more effective.</td>
<td>Routinely monitors the effectiveness of the group and works to make the group more effective.</td>
<td>Occasionally monitors the effectiveness of the group and works to make the group more effective.</td>
<td>Rarely monitors the effectiveness of the group and does not work to make it more effective.</td>
</tr>
</tbody>
</table>

[http://rubistar.4teachers.org/index.php](http://rubistar.4teachers.org/index.php)
Oral Presentation Rubric: People vs. Pigeons

Teacher Name: _______________________________________

Student Name: _______________________________________

Score _____/28

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparedness</td>
<td>Student is completely prepared and has obviously rehearsed.</td>
<td>Student seems pretty prepared but might have needed a couple more rehearsals.</td>
<td>The student is somewhat prepared, but it is clear that rehearsal was lacking.</td>
<td>Student does not seem at all prepared to present.</td>
</tr>
<tr>
<td>Time-Limit</td>
<td>Presentation is 5-6 minutes long.</td>
<td>Presentation is 4 minutes long.</td>
<td>Presentation is 3 minutes long.</td>
<td>Presentation is less than 3 minutes OR more than 6 minutes.</td>
</tr>
<tr>
<td>Speaks Clearly</td>
<td>Speaks clearly and distinctly all (100-95%) the time, and mispronounces no words.</td>
<td>Speaks clearly and distinctly all (100-95%) the time, but mispronounces one word.</td>
<td>Speaks clearly and distinctly most (94-85%) of the time. Mispronounces no more than one word.</td>
<td>Often mumbles or can not be understood OR mispronounces more than one word.</td>
</tr>
<tr>
<td>Posture and Eye Contact</td>
<td>Stands up straight, looks relaxed and confident. Establishes eye contact with everyone in the room during the presentation.</td>
<td>Stands up straight and establishes eye contact with everyone in the room during the presentation.</td>
<td>Sometimes stands up straight and establishes eye contact.</td>
<td>Slouches and/or does not look at people during the presentation.</td>
</tr>
<tr>
<td>Content</td>
<td>Shows a full understanding of the topic.</td>
<td>Shows a good understanding of the topic.</td>
<td>Shows a good understanding of parts of the topic.</td>
<td>Does not seem to understand the topic very well.</td>
</tr>
<tr>
<td>Collaboration with Peers</td>
<td>Almost always listens to, shares with, and supports the efforts of others in the group. Tries to keep people working well together.</td>
<td>Usually listens to, shares with, and supports the efforts of others in the group. Does not cause &quot;waves&quot; in the group.</td>
<td>Often listens to, shares with, and supports the efforts of others in the group but sometimes is not a good team member.</td>
<td>Rarely listens to, shares with, and supports the efforts of others in the group. Often is not a good team member.</td>
</tr>
<tr>
<td>Volume</td>
<td>Volume is loud enough to be heard by all audience members throughout the presentation.</td>
<td>Volume is loud enough to be heard by all audience members at least 90% of the time.</td>
<td>Volume is loud enough to be heard by all audience members at least 80% of the time.</td>
<td>Volume often too soft to be heard by all audience members.</td>
</tr>
</tbody>
</table>

http://rubistar.4teachers.org/index.php
Online Resources (General)

   o SCROLL DOWN for links for information regarding dealing with specific animals.
   o Bats, Deer, Coyotes, Foxes, Ducks, Raccoon, Woodchucks, Skunk, Squirrels
   o Includes a few 30 second videos.
   o Use only the specific animal links

   http://www.hsus.org/ace/19400
   o SCROLL DOWN for good info under the following links:
     ▪ If You Love Wildlife, Keep Your Cat Inside
     ▪ Manufacturers and Suppliers of Products Used to Resolve Wildlife Conflicts—get a
       list of possible deterrents—does not explain what they are or how to use them
     ▪ Sanctuary in the City—personal story but good idea about rooftop gardens
     ▪ Solving Problems with Your Wild Neighbors—Black Bears, Crows, Deer, Moles,
       Pigeons, Porcupines, Rabbits, Raccoons, Skunks, Snakes, Squirrels, Woodchucks,
       Woodpeckers
     ▪ The Humane Approach to Human-Wildlife Conflicts—good intro to deciding if there
       actually is a problem and then to making a decision to resolve it.
     ▪ To Feed or Not to Feed Wildlife?—good info on the pros and cons of feeding the
       wildlife
   o Avoid other links as they contain more opinion than research/facts

3. USDA Forest Service: Urban Wildlife—
   http://www.urbanforestrysouth.org/pubs/ufmanual/wildlife/
   o Factual information—Addresses problems and possible solutions clearly and concisely
   o Links to other sites not helpful
   o Written at adult level—scroll down to the useful information

4. Routt County [Colorado] & Steamboat Springs Community Center…Urban Wildlife:
   Situations and Solutions http://www.yampavalley.info/pets0019.asp
   o Clear headings and brief information
   o Although in Colorado, can be generalized to other urban areas

   o No link to home page
   o Quick list of problems, solutions, and definitions—similar information to Routt County site

   o Public Health Risk from Wild Birds—list of quotes supporting little to no risk from birds
   o Bird Control FAQ—good, simple language about bird control
   o Bird Control Products (deterrence and avoidance)—includes pictures and brief
     descriptions
   o Ignore other links—they’re either too intellectual, too opinionated, or simply not
     relevant

7. The Fund for Animals: Tips on Co-Existing with Urban Wildlife
   http://www.fundwildlife.org/coexist/
   o The following links may be useful:
     Coyotes, Raccoons, Opossums, Skunks, Bats, Rodent Proofing Your House

8. Wildlife Information for Indiana
   http://www.entm.purdue.edu/wildlife/Wildlife%20Information.htm#Fox
   o Numerous mammals, birds, reptiles & amphibians
   o Be prepared to move your screen since the color scheme on this site is a bit difficult
Canada Geese

   o Lots of readable information in paragraph form

   o Written for adults
   o Numerous suggestions for getting rid of geese

   o One page of child-friendly information
Foxes

1. Indiana Department of Natural Resources—Gray Fox
   http://www.state.in.us/dnr/fishwild/publications/lifeseries/gfox.htm
   o Good, clear info about the gray fox, what it eats, where it lives, etc.

2. Wildlife Information for Indiana
   http://www.entm.purdue.edu/wildlife/Wildlife%20Information.htm#Fox
   o Numerous mammals, birds, reptiles & amphibians
   o Be prepared to move your screen since the color scheme on this site is a bit difficult

3. eNature.com
   http://www.enature.com/search/show_search_byShape.asp?curGroupID=5&shapeID=1028
   o Gray and Red Fox—others don’t live in Indiana
Moles

1. **Effective Mole Control—Ohio State University Fact Sheet**
   [http://ohioline.osu.edu/w-fact/0011.html](http://ohioline.osu.edu/w-fact/0011.html)
   - Written with adult homeowners in mind
   - Suggestions for getting rid of them in humane ways

2. **Molecology—The Humane Relocation of Moles**
   [http://www.molecology.co.uk/](http://www.molecology.co.uk/)
   - Personal Web site rather than scientific
   - Cute and practical
   - Not informative except for catching the mole in your yard *compare the advice on this page to The Moleman page*

3. **The Moleman**
   - Although this is a commercial business site, it does provide accurate and clear information in the Mole Biology, Mole Control, and Frequently Asked Questions links.

4. **Moles and Their Control**
   [http://ianrpubs.unl.edu/wildlife/g1288.htm](http://ianrpubs.unl.edu/wildlife/g1288.htm)
   - Accurate information written at an adult level
Snakes

1. **Snakes of Indiana** [http://herpcenter.ipfw.edu/outreach/INherps/INsnakes.htm](http://herpcenter.ipfw.edu/outreach/INherps/INsnakes.htm)
   - Some good info about what classifies as a snake and why their habitats are disappearing
   - Written for high-level readers
   - The list of snakes in IN is not linked from the site, but can be found through this link: [http://herpcenter.ipfw.edu/index.htm?http://herpcenter.ipfw.edu/outreach/INSnakeList.htm&2](http://herpcenter.ipfw.edu/index.htm?http://herpcenter.ipfw.edu/outreach/INSnakeList.htm&2) Concentrate on snakes found **statewide** or in **central** Indiana

2. **Snakes of Indiana State Parks and Reservoirs** [http://www.state.in.us/dnr/parklake/brochure/snakes.pdf](http://www.state.in.us/dnr/parklake/brochure/snakes.pdf)
   - Adobe Acrobat Pamphlet; Increase the size so you can read it
   - Not all snakes listed
Inquiry Project
Post-Project Evaluation

On a scale of 1-4, how well can you do the following tasks?
1—barely or not at all
2—know how, but make frequent errors
3—comfortable, but make occasional errors
4—I’m a pro at this!

_____ Use a computer mouse
_____ Type with both hands
_____ Save my work in a specific file
_____ Change the size of print, like this
_____ Underline or make the print **bold**
_____ Copy and paste words or pictures

_____ Think of many words that mean the same or similar thing
(example: Write down as many words as you can think of for the “things” people drive on the road)
1 or 2—give yourself a 1; 3 or 4—give yourself a 2; 5—give yourself a 3; 6 or more—give yourself a 4)

_____ Get back to an internet site that you visited 2 minutes ago without retyping the address
_____ Use the library computers to search for a book in the library
_____ Use the call number to locate a book in the library
_____ Find the author of a book
_____ Find the date a book was published
_____ Find the Table of Contents in a book
_____ Use the index in a book

Start at the top of the list and put a star ★★ next to each task that you think you do better now than you did before this project.
TOOL KIT 3: LIBRARY RESOURCES

This is a guide for the librarian who is taking responsibility for initiating the program and acting on behalf of the library as a resource.

TABLE OF CONTENTS

Library Resources contains these components in order of use:

<table>
<thead>
<tr>
<th>Component</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Librarian’s Role in the Program</td>
<td>30</td>
</tr>
<tr>
<td>2. The Materials from the Library’s Collection</td>
<td>30</td>
</tr>
<tr>
<td>3. Library Space</td>
<td>31</td>
</tr>
<tr>
<td>4. Library Equipment</td>
<td>31</td>
</tr>
<tr>
<td>5. Supplies Outside of the Collection</td>
<td>31</td>
</tr>
</tbody>
</table>
The Librarian’s Role(s) in the Program:

**Information Specialist for Primary Learners**—The librarian will select appropriate print and online resources for the students depending on local resources available and students’ abilities to use them effectively. (5 hours)

**Instructor in Information Literacy/Inquiry Skills for Primary Learners**—The librarian will instruct the students in how to find and use the selected resources. (1-2 hours *instructional time* + 9-15 hours *collaborative supervisory time*)

**Partner to Teacher**—The librarian and teacher will work together to divide students into groups, develop and explain rubrics for students, and monitor students during their research and publication phases. (1 hour+ as needed during *instructional time*)

**Program Advocate and Administrator**—The librarian (or teacher) will make needed copies of materials for students, contact local experts as needed, and invite community members to presentation. (1-3 hours)

The Materials from the Library’s Collection:

*The type and subject of the materials needed depends on the number of students participating, availability of computers for online research, and the animals chosen for research.*

- Various books/magazines found in the school’s library or local public libraries.
- Computer databases that the school library is able to access (free or subscription).
- Web sites—either those provided with the replication kit or other sites that are more current/relevant for the students.
- Local wildlife experts, if available—can be contacted via phone, e-mail, or invited to come to speak with students personally.
Library Space, Equipment, and Supplies Outside of the Collection:

► Space

☐ Tables/chairs in one section of the library—students can bring print resources to the tables and work together.

☐ Computers (computer lab, laptops, or desktops in the library)

☐ Place for supplies for presentation materials (i.e. poster board, markers, glue/tape, etc.)

☐ Board or screen/projector to display daily instructions for students

► Equipment

☐ If ability level of students is adequate, programs such as Word or PowerPoint may be used for the presentation.

► Supplies

<table>
<thead>
<tr>
<th>Consumable*</th>
<th>Reusable*</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ paper for journaling, note-taking, planning (10-15 sheets per student)</td>
<td>☐ scissors, rulers</td>
</tr>
<tr>
<td>☐ student folders for organization (1 per student)</td>
<td>☐ markers</td>
</tr>
<tr>
<td>☐ colored dividers for student folders (3 different colors per student folder)</td>
<td>☐</td>
</tr>
<tr>
<td>☐ tape, glue (per group)</td>
<td>☐</td>
</tr>
<tr>
<td>☐ poster board (1 per group)</td>
<td>☐</td>
</tr>
</tbody>
</table>

*Many of these items may be part of the supplies students bring to the classroom at the beginning of the year.
TOOL KIT 4: PROGRAM ADMINISTRATION

This is a guide for the librarian or primary partner who is taking responsibility for initiating the program, coordinating the efforts of all partners, and tabulating and reporting the evidence-based program measures

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Project Timeline and Critical Logistics

1. **4+ weeks before** implementation—choose partner and set starting date for project

2. **3+ weeks before** implementation
   - Determine skill level of students (with partner)
   - Gather/reserve print resources (LMS)
   - Contact potential community experts if desired (LMS or partner)
   - Check online resources; choose additional resources, if needed (LMS)
   - Reserve needed space and computers (LMS or partner)
   - Check calendar and reserve time slots for each day’s lessons (LMS and partner)
   - Implement mini technology lessons as needed (LMS and partner)
   - Gain parental permission for internet/computer usage if needed (partner)

3. **1+ weeks before** implementation
   - Check online resources for accurate links and usability (LMS)
   - Meet with partner to make sure all necessary arrangements have been made.
   - Assemble student folders (LMS or partner)

4. **Implementation** (9 sessions)—specific timeline for this portion included in the Instructional Guide

5. **Post**
   - Return items borrowed from outside sources (public library books, etc.)—LMS
   - Compile Data to substantiate learning (LMS and partner)

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**Partner’s Role/Profile**

The partner (“coach”) should be an energetic, creative, and flexible classroom teacher. He or she should share the instructional and assessment responsibilities with the LMS, but will take a primary role in assigning students to groups and monitoring behavior problems since he or she better knows the individual needs and abilities of the students. The teacher and LMS should specify duties during one of their planning sessions.

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**Promotion and Advocacy Tools**

Although teachers are required to teach research skills, not all feel comfortable with large projects; so if the LMS presents this as an opportunity to share the instructional and assessment loads while meeting state and curriculum standards, the teacher will respond in a more positive manner.

Likewise, students are required to come to class, but they enjoy choosing the direction of their learning. Presenting this as an opportunity to explore, learn, and present new ideas with their peers will immediately entice the students to begin working.

Parents and administrators want to know that students are learning, and enjoying themselves in the process. Invite parents to visit anytime the students are working and encourage them to talk with the students about what they’re learning. Invite parents and administrators to the presentations so they can applaud the finished products!
Measurement Guidelines

**Journals**
It is difficult to pull hard data from journals, but they can be used for providing immediate feedback that guides instruction to meet individual and group learning needs. Journals can also be used to demonstrate trends in student learning and motivation. Some key points to keep in mind when using journals for measurement:

- Allow at least some free response; otherwise, it’s not journaling but more formal assessment.
- Do NOT share journal responses with other students or teachers (except the partnering teacher) since this will inhibit students from feeling safe when writing honestly. Make it clear to students who will be reading their journals.
- DO read journals after each session (this why having a day or more between sessions is beneficial) and write responses next to the student’s writing. This response lets students know that their work is being read and it is your way of quickly providing correction or additional instruction on an individualized and personal basis. If the instruction is too difficult or lengthy to put in writing, then a simple “please see ___” will direct the student to come ask for clarification.
- DO make note of common errors and misconceptions so you can address those needs during large-group instruction time.

**Pre/Post Tests**

- Keep the questions as simple and direct as possible using terminology that is commonly used in your school. If the students have to repeatedly ask for clarification, then they’re being tested on whether they can understand the actual questions, not the content behind the question.
- Keep the pre-/post-tests as similar as possible so the data is accurate and reliable.
- You may choose to make your own pre-/post-tests based on what you think the students already know and what they will have time to learn during the project. You may also change the format to yes/no rather than a 1-4 scale to provide more defined results.
- Record results in Excel using a separate column for each question and a separate row for each student. The final column can be used to average an individual student’s understanding of all the questions; the final row can be used to average the class’ understanding of a specific question. A second table, identical to the first can be created for the post-test. A third table can be created to examine positive and negative changes for specific questions or groups of questions. If you are not familiar with Excel, get help from someone who is!!

**Rubrics**

- Students can benefit greatly from helping to create the rubrics that will be used to score their projects. If they have input, they will understand exactly what is being evaluated and what constitutes high quality work.
- At the very least, present the rubrics to the students and go through them, presenting examples for each category to clarify any questions the students may have.
- Refer the students back to the rubrics throughout the project so they will be focused on completing high quality work.
- The teacher (partner) will likely want to include the rubric scores in the student’s grade for that subject.
## Project Resources with Budget

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Sites</td>
<td>Pre-selected internet sites about specific animals</td>
<td>Free</td>
</tr>
<tr>
<td>Online Databases</td>
<td>Kid-friendly databases with information about specific animals</td>
<td>Free/Subscription *may be provided by school district or through state funding</td>
</tr>
<tr>
<td>Print</td>
<td>Books/Reference materials owned by school or local public library</td>
<td>Free *may need to purchase additional resources &lt;$600 —possible grant funding</td>
</tr>
<tr>
<td>Community Experts</td>
<td>Local park/wildlife experts; Department of Natural Resources/Management personnel; Local university/college professors/students; etc.</td>
<td>Free</td>
</tr>
<tr>
<td>Presentation Supplies</td>
<td>Poster board, paper, markers, glue, scissors, etc.</td>
<td>&lt;$50/class—use regular student supplies, parent donations, include in grant proposal</td>
</tr>
</tbody>
</table>

## Grant Recommendations

1. Choose a local funding source that caters to small grants that directly impact students.
2. Research your needs before writing a grant proposal so the request can be specific.