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Observing Digital Problem Solving Checklist

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Observing Digital Problem Solving Checklist

This tool is used by a librarian/staff/volunteer in an in-person setting to better understand how to shape interactions with a patron when they come in for assistance. Use this tool to support individual interactions or a small group.

Answers to the questions provide information about access, experience, and range contexts of use. This background information provides as a jumping off point for the next steps observing digital problem solving.

Questions: Contexts of Use

1. Do you have the Internet at home on a device other than your mobile phone?
2. Do you use the library’s website? IF NO, DON’T ASK QUESTION 5 & 6
3. Do you go online to do things? What do you do when you’re online?
   Ask the patron to list. IF the patron becomes stuck, then the librarian/volunteer should provide a nudge and ask, do you look up information online (if yes, ask what kind of information such as health, hobbies, shopping, other)?
4. Do you have a library card? IF NO, DON’T ASK QUESTION 5
5. Do you access and manage your library account online? What kinds of things do you do?
   ● Library should create a list of what can be done online. For example,
     ○ Place holds
     ○ Renew books
6. How do you use the library’s website? IF the patron is stuck, then the librarian should provide a nudge from a list:
   ● Library should create a list of what can be done on the library’s website. For example,
     ○ Find classes
     ○ Get a reading recommendation
     ○ Look for volunteer opportunities
     ○ Find e-books
     ○ Get audio books

<table>
<thead>
<tr>
<th>Needs More Support</th>
<th>Needs Less Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>No access to internet at home</td>
<td>Has access to the internet at home</td>
</tr>
<tr>
<td>Does not use library website</td>
<td>Manages their library account online</td>
</tr>
<tr>
<td>Uses library website for limited purposes</td>
<td>Uses the library website for a range of purposes</td>
</tr>
<tr>
<td>Uses the internet for non-specific purposes</td>
<td>Uses the internet (beyond the library website) for a broad range of purposes</td>
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Observational Protocol

Use the observational protocol to learn what patrons can actually do online. Bring the patron to a computer and sit next to them.

Say: What did you come in to do today? Show me what you’ve done so far. If they have not begun, ask them to show how they would start.

OR

Use one of the scenarios your library has developed based on the Blueprint for Designing Digital Problem Solving Tasks. Ask the patron to engage in the information seeking task as a way for you to observe their ability to use multiple online resources.

Observe and document how they shift their approaches and how their use of strategies differs depending on their experience, knowledge about the task and the contextual aspects of the problem being solved. Use the charts on the following pages to document what you observe.

Tell the person you will provide some feedback, based on your observations, and that will help them develop their digital problem solving abilities and apply them within their lives and for the purposes they decide for themselves.
Two Categories of Strategies

**Information Seeking Strategies**
- Identifying information needed,
- Identifying the purpose of the task,
- Checking and rechecking one’s progress/work

The three information seeking strategies do not occur in a step by step fashion and are instead interdependent and recursive. Therefore, we grouped the observation checklist so that these areas can be looked at in combination.

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Has trouble determining the important information in the tasks</td>
<td>Attends to some features of the task; lacks attention to detail</td>
<td>Attends to the task specifics</td>
</tr>
<tr>
<td>Lacks background for the task</td>
<td>Doesn’t grasp all relevant details</td>
<td>Grasps most relevant details and navigates resources with some fluency</td>
</tr>
<tr>
<td>Misses key details</td>
<td>Some background for the task but not in a digital way</td>
<td>Satisfied enough with responses; even knowing it’s not entirely correct</td>
</tr>
<tr>
<td></td>
<td>Attends to only some of the task details</td>
<td>Checks and rechecks work</td>
</tr>
</tbody>
</table>

**May say:** I don’t quite get it,
- I kinda get the idea, but I’m not sure I know the steps to get there,
- I’m not sure how to use (email program, spreadsheet, in site search bar, etc.)
- I find it hard to do all these steps

**May say:** I think I get it.
- I’m moving too fast to attend to all the specifics
- I don’t attend to detail well.
- I’ve done things like this before (might over-rely on prior experience)
- I know it’s not perfect but it’s good enough

**May say:** I’m not sure what I’m supposed to do
- I don’t know how to start
- I’ve never done this before
- I don’t know what these do or how to use them (email program, spreadsheet, in site search bar, etc.)

**May say:** I don’t quite get it,
- I kinda get the idea, but I’m not sure I know the steps to get there,
- I’m not sure how to use (email program, spreadsheet, in site search bar, etc.)
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- I’m not sure how to use (email program, spreadsheet, in site search bar, etc.)
- I find it hard to do all these steps
**Navigation Strategies**

- Identifying the purpose of an interface or function of an interface
- Exploring the resources and interfaces
- Experimenting with the available interfaces

These navigation strategies build from simpler applications to more complex.

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<th>Needs Less Support</th>
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<tbody>
<tr>
<td>Limited navigation.</td>
<td>Examines all available resources to decide what would be most useful and helpful.</td>
</tr>
<tr>
<td>Lacks context to know what interfaces they looking at are and how to use them.</td>
<td>Willingness to change strategies if what they’re attempting isn’t working.</td>
</tr>
<tr>
<td>Lacks an understanding of the conventions associated with resources.</td>
<td>Explores new directions.</td>
</tr>
<tr>
<td>Seeks to wait for direction rather than explore or experiment</td>
<td>Knows what the interfaces/tools are and what they do.</td>
</tr>
<tr>
<td>Tentative/Afraid</td>
<td>Knows the difference between resources to use them.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Tentative/Afraid</th>
<th>Careless/Quick</th>
<th>Over-relies on knowing one interface and expects that others work the same way</th>
</tr>
</thead>
<tbody>
<tr>
<td>May say: I’m not sure what this does or how to work it</td>
<td>I don’t know how to use this</td>
<td>Keeps trying the same approach over and over, can’t figure out how to adjust/revise approach</td>
</tr>
<tr>
<td>I don’t know how to use this</td>
<td>I’ve never seen this before (doesn’t click around)</td>
<td>Some experience with a range of interfaces but difficult see how to use that knowledge in new situations.</td>
</tr>
<tr>
<td>I’ve never seen this before (doesn’t click around)</td>
<td>I’m not sure I know the steps to get there,</td>
<td>Tries and makes multiple attempts, misses key details.</td>
</tr>
<tr>
<td>I don’t know what these do or how to use them (email program, spreadsheet, in site search bar, etc.)</td>
<td>I’m not sure how to use (email program, spreadsheet, in site search bar, etc.)</td>
<td></td>
</tr>
<tr>
<td>May say: I think I get it.</td>
<td>May say: I don’t quite get how this works, but I’ll click around</td>
<td>May say: I can do this, I have used interfaces like this to do [name the contexts]</td>
</tr>
<tr>
<td>I’ve done this before, and know how it works (expects all similar interfaces to work the same way).</td>
<td>I kinda get the idea, but I’m not sure I know the steps to get there,</td>
<td>I’ll try this another way, and look around to see what [tools interfaces resources] I can use</td>
</tr>
<tr>
<td>This isn’t supposed to work this way</td>
<td>I’m not sure how to use (email program, spreadsheet, in site search bar, etc.)</td>
<td>Oh, let me see what this does [clicks around]</td>
</tr>
<tr>
<td>I would use this [resource, tool, interface]</td>
<td>I may not be able to follow through with all the steps</td>
<td>I have experience doing things like this online, I think I got it</td>
</tr>
<tr>
<td>I know its not perfect but it’s good enough</td>
<td></td>
<td></td>
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</tbody>
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