

## 5. Self-Assessment Strategies

### Defining Self-Assessment in 21<sup>st</sup> Century Learning

Learners in the 21<sup>st</sup> century must take charge of their own learning in order to be able to sort through and make sense of the overwhelming amount of available information and use the information to fulfill personal and academic needs. Both the “what” and the “how” of learning have become so complex in today’s global society that learners must make constant decisions throughout their own learning process (e.g., Do I have enough information to make a good decision?; Am I getting good, unbiased information or is someone just trying to sell a point of view?; Do I need to get the most current information online and how do I make sure that information is accurate?). These decisions are based on self-assessment, the cornerstone of independence in learning.

Self-assessment means developing internal standards and comparing performance, behaviors, or thoughts to those standards. A teacher or librarian can assess the explicit products of students’ learning processes (e.g., how many ideas did a student contribute to a group discussion; how effective was a student’s final presentation), but only the students can assess their own thinking, attitudes and motivations. Self-assessment, then, involves a reflective process of self-monitoring according to internal standards (How am I doing?) and metacognition (How am I thinking?).

### Self-Assessment and the Learning Process

At different points in the learning process, learners may assess, or reflect on, their own processes of learning (skills, dispositions, responsibilities), their learning products (content, presentation), or their own thinking. Reflection must become intrinsic to learning so that learning is not defined as an accumulation of information, but rather as the thoughtful processing of information to produce, apply, and create knowledge. Self-assessment strategies are neither standard-specific, nor grade-level specific.

Self-assessment is three-directional: 1) Looking backwards at work that has been done to see how successful it was (summative assessment); 2) Looking at the present to determine the next steps (formative assessment); and 3) Looking at the future to decide what has been learned that will make the learning process more effective in the future (predictive assessment).

Self-assessment is enhanced by applying it in a social context, because learning itself is social. Learners can assess their own performance and progress more effectively by gathering feedback from others, looking at how their individual skills contribute to group learning, thinking about the responsibilities and dispositions that are most appropriate for the learning situation and others around them, and maintaining an eye on the applications of their learning to the real world.

Self-assessment with the opportunity to revise yields increased competence and confidence; that combination of competence and confidence leads to huge increases in achievement. The ultimate result of self-assessment is that students develop their own voice and become empowered to be independent and socially responsive learners.

### Teaching for Self-assessment

Students learn self-assessment through a combination of teaching strategies. **Direct instruction** is appropriate at any time, especially when students are learning a new self-assessment strategy, like reflective notetaking. Librarians might teach, for example, students to ask themselves questions during notetaking as they interact with text (Is this true?; How does this fit with what I already know?; Is there another viewpoint on this issue?; What other questions do I have?). Rather than teaching specific strategies, librarians and teachers may choose to provide **models of exemplary performance** to enable

students to internalize a solid understanding of the expectations and compare their performance with the model. Finally, librarians and teachers may guide students' self-assessment by providing **scaffolding**.

When students are assessing their own learning, they may use strategies that involve reflection, feedback from others, or self-questioning. The following are examples of scaffolding that might be provided by the teacher or librarian for each of these types of strategies. The examples are presented generically so that they can be adapted for any grade level or content area.

### **Reflection**

*Reflection logs* – Students write in a journal or log on a regular basis about their research experience. They may indicate simply what they tried and what they accomplished each day, what frustrations or barriers they are experiencing, what they plan to do next, what questions they have about the subject or process, or what they want to remember later when creating their final product. Librarians and teachers may scaffold attention to specific items or provoke continued progress by offering a prompt for the reflection-log writing (e.g., What was the most important idea you learned today? Why?; What new question has emerged from your research and how do you think you will find the answer?; What's the best online source you've found? Why?). Although the librarian or teacher will want to review and respond to the logs occasionally, their main value lies in the students thinking about their own work.

*Process folios* – Process folios are strategic collections of the process work of learning, just as portfolios are strategic collections of the products of learning. Students begin with a reflection on their whole research process, looking at the barriers and successes along the way. Students then document and reflect on the phases of their learning experience, which might include their initial topic selection, development of questions, search strategy, evaluation of sources, evaluation of information, reflective notetaking, and organization of final product.

*Reflective notetaking* – Many teachers and librarians teach students to do two- or three-column notetaking. This structure leads students to think about the notes while they are taking them because the right column is usually for student reactions to the ideas in the notes. Librarians and teachers may provide prompts for the reflections column or they may leave it up to students to react however they feel is appropriate. The result of using reflective notetaking is that students have already made sense of the information before they try to draw conclusions and organize and create their final product.

### **Using Feedback from Others**

*Rubric or checklist* – Students may provide valuable feedback to their peers by using a rubric or checklist to look at the work and providing comments for suggested revisions. Peer feedback is most useful in the skills area. Embedded within the latter part of this document are Levels of Proficiency for many of the 21<sup>st</sup> century learning skills in these standards. These may easily be extracted and combined to provide a rubric for the skills being addressed during a particular learning experience.

Checklists offer a quicker way for peers to offer feedback. The items on the checklist should correspond with the skills being emphasized during that learning experience. The following chart is a brief example of a checklist for Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.

<b>Criteria in Evidence</b>	<b>Yes</b>	<b>Partly</b>	<b>No</b>
Outline or graphic organizer of ideas is reflected in the organization of the final product			
Conclusion is clearly stated or presented			
Evidence is offered that supports conclusion			
The format of the presentation is appropriate for the audience			
All sources have been documented correctly			
The final product shows clear understanding of the topic			
The final product shows creativity			

*Peer questioning or consultation* – Students can help each other think through their learning process by asking questions and engaging in conversations at strategic points. These peer-to-peer consultancies may be helpful at several phases during the process. Teachers and librarians may provide a set of questions for students to ask each other to help them structure the conversation. For example, at the early stages of research, students might ask each other: What are the questions that you're trying to answer? Why do you want to know this? What do you already know? Where are you going to look to find the answers? What are the key words that you think will help you search?

### **Self-Questioning**

Student self-assessment may be most effective when students learn to question themselves throughout the learning process. Teachers and librarian can scaffold self-questioning by providing questions that are specifically designed around the targeted skills, responsibilities, and dispositions for each learning experience. The following generic examples are provided for all four of the standards in *Standards for the 21<sup>st</sup>-Century Learner*.

Teachers and librarians may choose to invite students to participate in self-questioning by clearly communicating the value and purpose through a message similar to the sample provided.

#### **A Message to the Student**

As a student living and learning in the 21<sup>st</sup> Century, your life is filled with accessibility and opportunities to interact with information and ideas in many formats. In school and at home there are many ways to retrieve information. As a learner you face many challenges. Electronic and print resources are very diverse and present information in a wide variety of formats. You have to possess the skills for finding information and using that information appropriately and effectively. Your new understanding must be communicated to others using new tools and technologies. You live and work in a complex information landscape!

As you make your way toward a rapidly changing future, you are challenged to prepare yourself. As a 21<sup>st</sup> century learner you are challenged to learn content, learn how to learn, and think about how well you are learning and performing. You participate in this process in concert with your teachers and other students. Reflecting on your learning and process is called metacognition, meaning “thinking about thinking.”

In taking charge of your learning you:

- define your problem or task
- investigate solutions
- evaluate and change your process
- make decisions about the effectiveness of your work
- evaluate the final outcome.

The following questions can serve as a guide as you engage in navigating the rapidly changing information landscape.

#### **Standard 1: Inquire, think critically, and gain knowledge**

What interests me about this idea or topic?

Why am I doing this research?

How will I find out about this idea or topic?

What do I already know or think I know about this topic?

What background information would help me get an overview of my topic so that I can ask good questions and learn more about it?

What intriguing questions do I have about the topic or idea? Can my questions be answered through investigation?

What do I expect to find?

What is my plan for research?

What are all the sources that might be used?

Which sources will be most useful and valuable?

How do I locate these sources?

Have I located sources with diverse perspectives?

How do I find the information within each source?

How do I evaluate the information that I find?

Have I found enough accurate information to answer all my questions?

Have I discovered information gaps and filled them with more research?

Have I begun to identify relationships and patterns and thoughtfully reacted to the information I found?

Have any main ideas emerged from the research?

How well did my inquiry process go?

**Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge**

How does the evidence I found help me form an opinion or support my thesis?

What organizational patterns will help me make sense of my information?

What technology tools will help me organize and make sense of my information?

What decisions or conclusions have I drawn and how are they supported by the evidence?

What new understandings did I develop about the topic or idea?

How do those new understandings apply to other situations or contexts?

What did I learn about inquiry?

What new questions do I now want to answer about the topic or idea?

**Standard 3: Share knowledge and participate ethically and productively as members of our democratic society**

What type of product or presentation will allow me to present my conclusions and evidence effectively to the intended audience?

How have I organized the product/presentation to make my major points and present convincing evidence?

What technology will help me create a product or presentation?

How will I get help to revise and edit my product?

How well does my product/presentation fulfill all the requirements of the assignment?

How can I make my product/presentation as effective as possible?

How can I get feedback on my final product to use in my next inquiry project?

How have I contributed to the learning of others?

How have I shown responsibility in finding and using information in an ethical way?

**Standard 4: Pursue personal and aesthetic growth**

Why am I interested in this idea? How does it connect to what's important to me personally?

How can I find interesting information about this idea?

Why does this author or genre appeal to me? What other genres have I tried?

How can I make sense of information that is scattered among many different sources, both in print and online?

How does this compare to other things I've read or viewed?

Why did the author or creator produce this?

Does this work give me a slanted picture of the world?

How can I share this experience with others?

How can I use technology to communicate and interact with others?

How can I express my own ideas creatively and effectively?