

***Classroom Observation Protocol for
Technology Integration
(COP-TI)***

**Indicator Reference Guide
Version 3.3**

Rating Indicators

We recommend that observers take a three-step approach to rating indicators, as summarized in the chart below:

Do you observe <i>any</i> evidence of the indicator as described?			
No ↓	Yes		
	Is there substantial room for improvement?		
	Yes ↓	No	
		Does the indicator <i>exceed</i> expectations?	
	No	Yes	
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3

First, determine if there is any evidence that the indicator is in place. If not, then assign a rating of 0. This simply means that the indicator was not observed—it is not a value judgment.

If the indicator is present at all, ask yourself whether or not the indicator is fully in place, exactly as described, or if there is clear room for improvement. If there is clear room for improvement, assign a rating of 1.

If there is evidence that the indicator is fully in place, ask if it exceeds expectations. If it does, assign a rating of 3; otherwise assign a rating of 2. A rating of 3 should be reserved for exceptional cases. Because ratings of 3 or 0 will be given less frequently, observers are advised to focus primarily on the important critical distinction between a 1 and a 2.

Note: It is important to distinguish between a rating of 0 and a rating of 1. A score of 0 should be given if the indicator is missing completely or if there is insufficient evidence to rate it. A score of 1 means that the indicator is partially in place.

1. Technology is used effectively during the lesson.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
The teacher may have technology in the classroom, but it is not in use during the observed period.	The teacher has technology in the classroom, but the use is ineffective. Technology is used in the same way that an overhead or chalkboard could be used.	The teacher has technology in use during the lesson and is effectively integrating it into the lesson. Without the technology the lesson would be less effective.	The teacher uses technology in ways that enrich or extend learning, which would not be possible without the technology.

Notes

- Examples of technology include computers and anything that can be connected to a computer. Examples include: digital cameras, document camera, mp3 players, PDAs, student responders, interactive whiteboards, peripheral devices, scanners, probes, etc.
- Overhead projectors should not be counted as technology because they cannot be used in conjunction with a computer.

2. Easy, sufficient access to computers with an Internet connection.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
The classroom has no more than one computer. The computer may also be inaccessible to students.	The classroom has more than 1 computer, but insufficient classroom access (less than a ratio of 5:1). The computers may not all be easily accessible to students.	There is sufficient classroom access to computers (ratio of 5:1). Student computer stations are configured so student can easily access them during work time.	The classroom has an abundance of technology resources (greater than a ratio of 5:1) that are easily accessible to students.

Notes

- Examples of inaccessible computers include: dust jackets on computers, password-controlled access (when students do not have the password), computers not plugged in, etc.
- This indicator is primarily focused on *physical* accessibility as opposed to *equitable* access.

3. Students have access to technology devices.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
Students do not have access to technology devices.	There are no technology devices, other than computers, available for students to use.	There are one or two technology devices, other than computers, available for students to use.	Students have access to three or more technology devices, such as calculators, digital cameras, and PDAs, that are used to enhance and enrich student learning.

Notes

- Examples of technology devices include anything that can be connected to a computer. Examples include: digital cameras, PDAs, calculators, peripheral devices, scanners, probes, etc
- It should be clear that students have permission to use the technology device.

4. Lessons designed to support learning objectives.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
Learning objectives are unclear or implied. The lesson may not support the learning objective.	Learning objectives are posted OR verbally communicated. The lesson somewhat supports the learning objective.	Learning objectives are posted AND verbally communicated. The lesson fully supports the learning objective.	Learning objectives are verbally communicated and posted. The lesson fully supports the learning objective. Checks are made to ensure that learning objectives are met by students. The majority of students understand the objectives.

Notes

- Learning objectives can include daily lesson objectives, unit objectives, project objectives, content standards, etc.
- To determine if the students understand the objectives check to see if the teacher needs to repeatedly explain the objectives or task to several students.
- Learning objectives are not simply what the students will learn about, but rather why they are learning the content.

5. Instructional approach is student-centered.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
Students have no choice in what they learn. They are passive learners receiving knowledge transmitted by the teacher. Teacher holds all of the power in the classroom.	Students are able to choose what they learn within a constrained set of options. Students are passive learners receiving knowledge transmitted by the teacher or other means. Teacher holds all of the power in the classroom.	Students are able to choose what they learn within a set of options. Students are active learners, but the lesson is teacher directed and students are responsible for learning the content deemed important by the teacher. The teacher has slightly more power than the students.	Students choose what they learn and are not unreasonably restrained in anyway. They are active learners responsible for their own learning. There is a balance of power between teacher and students.

Notes:

- The three main aspects of student-centered learning include what is learned, how it is learned, and who has the power or authority over the knowledge.
- A traditional lecture is an example of a not observed for student-centered learning, where as a inquiry or discovery oriented classroom is an example of exceeding expectations for a student-centered learning. Guided inquiry is an example of student-centered learning that could either be approaching or meeting expectations. A classroom with guided inquiry that is heavily dominated by the teacher would be considered approaching expectations.

6. When using technology, students remain on task and engaged in learning.

Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
The majority of the students are disengaged and barely paying attention. Several students are off task, sleeping, or there is no technology in use during the lesson.	The majority of the students are on task, but with low levels of engagement. Students may be responding to questions, but with little excitement.	The majority of the students are on task and engaged in learning. There are high levels of participation to respond and contribute to discussions.	The majority of students are on task and <i>intensely</i> engaged. Excitement is evident. Unsolicited comments about pleasure, accomplishment, or sharing success.

Notes

- Examples of off-task behaviors include searches on unrelated topics, visits to nonacademic Web sites, creation of unrelated electronic documents, unsanctioned use of online games or communication tools, and so on.
- It should be acknowledged that, owing to personal issues and/or learning disabilities, some students may have difficulty paying attention at all times. Keeping this in mind, it is not necessary that every single student be fully engaged at all times for the classroom to receive a high rating on this indicator. The question to ask is whether off-task behavior is a reflection of the classroom culture, or an exception to it. If the off-task behavior is clearly an exception, for example, having more to do with an individual student's emotional problems than with how the classroom is being managed, then the behavior should be ignored in establishing the rating.

7. Students use technology to communicate and collaborate with others outside the classroom.

Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
There is no evidence that technology is used to make connections to the world beyond the classroom.	There are some attempts to use technology to make connections beyond the classroom, but the attempts are passive or designed to share or collect information but not to actively pursue a two-way relationship with others in the community.	Technology is used to establish or participate in active, ongoing connections with others in the global community.	Technology is used to establish or participate in <i>extensive</i> , ongoing connections and collaborations with others in the global community.

Notes

- Examples of “passive” attempts at connections include the creation of classroom Web sites or blogs that share happenings, discoveries, or opinions without eliciting or encouraging feedback.
- To rate a 3 or 2 technology must be used to establish two-way communication with the global community. For example, creation of/involvement in discussion forums, e-mail communication between classrooms or with experts, blog entries that share perspectives and encourage feedback, or the creation/use of Web sites that encourage participation in some manner.

8. Students effectively use the Internet for research.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
There is no evidence of student using the Internet to extend their understanding of research problems and/or issues.	There is some evidence that students use the Internet, but for information gathering and investigation only.	There is clear evidence that students use the Internet to extend their understanding of problems and/or issues. Students gather information and are able to access high-quality Web sites efficiently.	Student use of the Internet for research is extensive. Students are <i>highly effective</i> in self-directed investigation, information gathering, and collaborative work.

Notes

- Evidence for this indicator includes student work samples or observation of the use of Internet resources for investigation, research, or electronic collaboration.
- To score 3 or 2, students should be able to efficiently search for Web sites, understand how to evaluate Web sites for accuracy, and use a variety of Web sites for research.
- Evidence of this indicator can also be found in student work that shows students have found information from multiple sources to put together well-researched papers. Evidence that students have included different points of view may also be apparent

9. Students evaluate online information for accuracy and authenticity.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
Students do not access online information for learning purposes or are not using any strategies to make evaluative judgments about the accuracy and authenticity of online information. Student choice of online resources is haphazard and random.	At least some students appear to access online information selectively. Strategies for evaluating the accuracy and authenticity of online information are ineffective or applied inconsistently.	Students apply strategies and criteria for evaluating online information. They identify sources of reliable and potentially unreliable online information.	Students use an established procedure when evaluating online information. They make efficient judgments about the accuracy of online resources and recognize traits that make these sources reliable or unreliable.

Notes

- Strategies to evaluate online information may include identifying and verifying the source credentials of online information, identifying the intended purpose of the Web site, following links from credible Web resources, and verifying questionable information from independent sources. Students should recognize universities, museums, government agencies, other reliable public service organizations, and news outlets as sources of accurate and authentic information.
- Evidence may include observation of student decision making; conversations between students and the teacher, students and other students, or between the observer and students; the content of student work samples; students identifying reliable patterns of Web site addresses (e.g., .edu, .k12, and .gov); posted evaluation procedures; samples of Web addresses with key components highlighted and detailed; and/or classroom lists of credible Web resources.

10. Students creatively use multimedia applications to convey information they have learned.

Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
There is no evidence of students using multimedia applications to convey information.	There is evidence that at least some students are using multimedia applications to convey information, but not in a way that is particularly effective.	There is clear evidence that students effectively use multimedia applications to convey information.	Students are <i>especially</i> adept at using multimedia software to convey information.

Notes

- Evidence for this indicator includes student work samples or observation of the use of multimedia applications for electronic collaboration or investigation.
- Multimedia applications may include digital photography or video, Web development software, and scanning tools. Multimedia products include PowerPoint presentations, Web sites, photo collages, and streaming video clips.
- Examples of “conveying information” include using multimedia to grapple with complex ideas and then persuasively communicate a perspective, such as a movie that shows multiple points of view on the issue of recycling in a community, as well as carefully using thought-provoking images to enhance the story.

11. Learning and innovation skills are built through classroom instruction.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
No mention of the skill.	Opportunities provided to build learning and innovation skills, but students are <i>not taught</i> learning and innovation skills.	Opportunities provided to build learning and innovation skills, and there is <i>some instruction</i> on any of the learning and innovation skills.	Opportunities provided to build learning and innovation skills, and there is <i>extensive instruction</i> on any of the learning and innovation skills.

Notes(from www.21stcenturyskills.org)

- Learning and innovation skills are what separate students who are prepared for increasingly complex life and work environment in today's world and those who are not.
- Skills include:
 - Creativity and Innovation: to think creatively, work creatively with others, and implement innovations
 - Critical thinking and Problem solving: reason effectively, use systems thinking, make judgments and decisions, and solve problems
 - Communication and Collaboration: communicate clearly and respectfully collaborate with others effectively

12. Information, media, and technology skills are built through classroom instruction.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
No mention of the skill.	Opportunities provided to build information, media, and technology skills, but students are <i>not taught</i> information, media, and technology skills.	Opportunities provided to build learning and innovation skills, and there is <i>some instruction</i> on any of the information, media, and technology skills.	Opportunities provided to build learning and innovation skills, and there is <i>extensive instruction</i> on any of information, media, and technology skills.

Notes (from www.21stcenturyskills.org)

- We live in a technology and media-driven environment, marked by access to an abundance of information, rapid changes in technology tools and the ability to collaborate and make individual contributions on an unprecedented scale. Effective citizens and workers must be able to exhibit a range of functional and critical thinking skills.
- Skills include:
 - Information Literacy: Assess and evaluate information, use and manage information
 - Media Literacy: Analyze media, create media products
 - Information, Communications, and Technology (ICT) Literacy: Apply technology effectively as a tool to access, manage, research, evaluate, and communicate information

13. Life and career skills are built through classroom instruction.			
Not Observed	Approaching Expectations	Meeting Expectations	Exceeding Expectations
0	1	2	3
No mention of the skill.	Opportunities provided to build learning and innovation skills, but students are <i>not taught</i> life and career skills.	Opportunities provided to build learning and innovation skills, and there is <i>some instruction</i> on any of the life and career skills.	Opportunities provided to build learning and innovation skills, and there is <i>extensive instruction</i> on any of the life and career skills.

Notes (from www.21stcenturyskills.org)

- Today's life and work environments require more than thinking skills and content knowledge. The ability to navigate the complex life and work environments in the globally competitive information age requires students to pay rigorous attention to developing adequate life and career skills.
- Skills include:
 - Flexibility and Adaptability: adapt to change, be flexible
 - Initiative and Self-direction: manage goals and time, work independently, go beyond basic mastery of skills to explore and expand learning
 - Social and Cross-Cultural Skills: interact effectively with others, work effectively in diverse teams,
 - Productivity and Accountability: manage projects, produce results
 - Leadership and Responsibility: guide and lead others, be responsible to others