21CLD Learning Observation Guide

This Guide is designed to provide a framework for researchers, school leaders and educators as they observe learning activities or lessons. The Guide is based on 21st Century Learning Design rubrics that were originally developed as part of the Innovative Teaching and Learning Research Project. Deeper definitions of each of these skills is provided in the 21CLD rubrics, where you can find more insights into what to look for in observing learning related to 21st century skills. This Guide can be used by researchers to measure the impact of professional development programs (such as 21CLD), and in conjunction with the Microsoft Partners in Learning School Research tool for measuring innovative teaching across the school.

The Guide can also be used by school leaders and educator peers to support professional development on innovative teaching practices. If used for this purpose, follow up discussion between the observer and the educator/s guiding the learning activity can be extremely valuable. Here are some suggestions that can help guide that discussion (can be used alongside existing frameworks for learning and reflection on teaching):

- Begin by clarifying the learning goals and intentions of the activity (not always clear from an observation).
- Discuss which 21st century skills were intended to be part of the learning. Most learning activities will not involve all of the skills but focus on a few of them.
- Focus on the intended 21st century skills, reflecting on the evidence or examples in the observed learning activity of that skill. Discuss students’ opportunities for developing those skills through the learning activity and if there are ways the learning could offer students deeper skill-building opportunities.
- Peer coaching guides to reflective discussions and open ended discussions can be usefully applied in these contexts.

Note: for research tracking and reporting purposes, transfer codes from items below to 21CLD Tracking Spreadsheet, where:

a = 1  
b = 2  
c = 3  
d = 4
1. Background Information (for research tracking purposes)

<table>
<thead>
<tr>
<th>1.1 Observer(s):</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 Date: <em>(DD/MM/YYYY)</em></td>
<td></td>
</tr>
<tr>
<td>1.3 School Name:</td>
<td></td>
</tr>
<tr>
<td>1.4 District / Local Authority / Region:</td>
<td></td>
</tr>
<tr>
<td>1.5 Teacher Name:</td>
<td></td>
</tr>
<tr>
<td>1.6 School and Teacher ID Number <em>(assigned by the researcher for teacher confidentiality)</em>:</td>
<td></td>
</tr>
<tr>
<td>1.7 Subject / Course: <em>(Optional: Mark one)</em></td>
<td></td>
</tr>
<tr>
<td>Humanities:</td>
<td>Sciences:</td>
</tr>
<tr>
<td>□ a Art, music, drama</td>
<td>□ d Computer science</td>
</tr>
<tr>
<td>□ b Reading and writing</td>
<td>□ e Earth sciences</td>
</tr>
<tr>
<td>□ c Social studies, history, government</td>
<td>□ f Biology</td>
</tr>
<tr>
<td></td>
<td>□ g Physics</td>
</tr>
<tr>
<td></td>
<td>□ h Chemistry</td>
</tr>
<tr>
<td>□ k Interdisciplinary <em>(describe):</em></td>
<td></td>
</tr>
<tr>
<td>□ l Other subject <em>(describe):</em></td>
<td></td>
</tr>
<tr>
<td>1.8 Average Student Age:</td>
<td></td>
</tr>
</tbody>
</table>

2. Learning Activity Design Description

2. Teacher’s Stated Learning Goals:
*(If possible, ask the teacher about the lesson or learning goals before class begins. If that is not possible, write down any goals that are stated or posted in the class. These may be different from the activities that you observe or what is achieved in class.)*
Collaboration occurs when a student works with others on some portion of the learning activity to develop a product, a design, or an answer to a complex question. When students have shared responsibility for the work, they are engaged in higher-level collaboration.

3.1 For example, during the observation, did students do any of the following?

- Work individually, with each student doing the same or very similar task? (no collaboration observed)
- Work together to give each other feedback on tasks that each student produces independently?
- Develop or complete a task together with other students for which they have shared responsibility?
- Work together to plan or create products that include contributions from each student?

Using your answers above as a guide, please describe the collaboration you saw in the classroom.
4. Knowledge construction

Students **construct knowledge** when they combine new information with what they already know to generate ideas that are new to them.

During the observation, did students do any of the following?

- a. Spent most of the time reproducing information they were given or using familiar procedures (repeating information or processes they had learned or read).
- b. Spent time **interpreting**, **analysing**, **synthesizing**, or **evaluating** information or ideas. Examples of this would be working on tasks with no single correct answer or previously learned solution (such as analyzing a character in a book or determining the optimal amount of water needed for growing a plant)?
- c. Applied their knowledge to work on a task that involved a wholly new context. (For example, students in a physics class might construct knowledge about heat principles from a study of the Earth’s inner core, and then apply what they learned to investigate the environment of Jupiter.)
- d. Connected their learning in one subject with what they have learned in other subject areas. (**Interdisciplinary** learning activities have **learning goals** that involve content, important ideas, or methods from different academic subjects (such as mathematics and music, or language and history).

Using your answers above as a guide, please describe the ways students constructed knowledge.
5. Self-regulation

Students develop **self-regulation** skills when they reflect on their own learning progress or receive effective feedback, usually over substantive time or extended projects. High level self-regulation skills develop when they can use that reflection or feedback to revise their work or deepen their understanding.

During the observation, did students do any of the following?

- Complete their work during the class or in very short time afterwards?
- Participate in an extended or in-depth project for which there are clearly established criteria for the success of their work?
- Use the learning goals or an assessment rubric to plan their own work or work according to a plan that they developed?
- Assess the quality of their own work or receive feedback from peers or teachers to revise their work?

Using your answers above as a guide, please describe the ways students planned and monitored their own learning.
Extending Learning Beyond the Classroom

In many classrooms, students work only with each other and their teacher. **Extending learning beyond the classroom** occurs when students have opportunities to collaborate or communicate with people from outside the classroom, consider and explore information, concepts, and cultures from outside their geographic area, or to work on solving authentic real world problems.

6. Global Citizenship

During the observation, did students do any of the following?

- Study information about other countries or cultures?
- Study topics about how the world is connected (for example, global warming, global market economy)? Or study issues directly relevant to their family or community.
- Communicate or collaborate on study topics with anyone from outside the school (for example, family members, peers from other schools, people from other countries or content experts)?
- Do work that will be used outside of the classroom setting (for example, publish suggestions for a better way to solve community or environmental challenges, or create an on-line web site for public use)?

Using your answers above as a guide, please describe the opportunities students had to extend learning beyond their classroom.
7. Real World Problem solving and Innovation

Students **problem-solve** when they develop a solution to a problem that is new to them, complete a task that they have not been instructed how to do, or design a complex product that meets a set of requirements. This is one of the most powerful ways to engage learning.

During the observation, did students do any of the following?

- Spent most of the time reproducing information they were given or using familiar procedures (repeating information or processes they had learned or read).
- Work on tasks with a defined challenge such as developing a solution to a problem that is new to them, completing a task that they have **not** been instructed how to do, or designing a complex product that meets a set of requirements. (For example, analyze a character in a book or determine the optimal amount of water needed for growing a plant)?
- Work on challenges that exist in the real world (are not purely academic examples).
- Work on challenges where they will demonstrate their work to an audience other than other students in the class or implement it outside of the classroom (for example, in their local community, to public officials, or on the Internet).

Using your answers above as a guide, please describe the ways students solved problems.
8. Use of ICT for Learning

This section focuses on the use of ICT in the learning activity. ICT is becoming increasingly common in the classroom, but it is often used to support practice on basic skills rather than to transform learning opportunities. This dimension examines how students use ICT—whether it is giving them new opportunities to construct knowledge or to act as designers of an ICT product.

Because some of the resources are not necessarily observable (in a lab used outside of class or at home), you may need to ask the teacher or a student about ICT resources used in the learning activity. (In this rubric, the term “ICT” encompasses the full range of available digital tools, both hardware (computers and related electronic devices such as smart phones, personal digital assistants, camcorders, graphing calculators, and electronic whiteboards) and software (including everything from an Internet browser and multimedia development tools to engineering applications, social media, and collaborative editing platforms).

In what ways did students use ICT during this learning activity? During the observation, did students do any of the following with ICT?

- ICT was not used by students in any way in the learning activity.
- Students use ICT to learn or practice basic skills or reproduce information. (for example, students use ICT to take notes or write stories, reports or essays, to revise their work, to find information, to turn in homework assignments).
- Students use ICT to support knowledge construction (for example, to analyse data or information or to create presentations) in ways directly related to the learning goals.
- Students use ICT to support knowledge construction and the ICT is required for the construction of this knowledge (it could not practically be done without ICT).

Using your answers above as a guide, please describe the types of ICT and the ways students used ICT.