

21st Century Learning Design Rubrics

Introduction

Educators globally are working to design new models of learning that better prepare learners for life and work in the 21st Century. The purpose of the 21st Century Learning Design rubrics is to help educators identify and understand the opportunities that learning activities give students to build 21st century skills. These rubrics were developed and tested internationally for the Innovative Teaching and Learning Research project.

A **learning activity** is any task that students do as part of their school-related work. It can be an exercise that students complete in one class period, or an extended project that takes place both in and outside of school.

This excerpt describes one of the **six rubrics of 21st century learning**, each of which represents an important skill for students for develop:

- collaboration
- knowledge construction
- **self-regulation**
- real-world problem-solving and innovation
- the use of ICT for learning
- skilled communication

In this guide, the description of the rubric has three parts:

- an **overview** of definitions of key concepts and related examples;
- a **rubric** to help you assign each learning activity a number from 1 to 4,* according to how strongly it offers opportunities to develop a given skill;
- and a **flowchart** that shows how to choose the best number in each case.

*In some cases the numbers from 1 to 5 are used, with 5 representing an additional, higher goal.

Self-Regulation

Is the learning activity long-term? Do students plan and assess their own work, and revise their work based on feedback?

Overview

Today's complex world demands self-regulated thinkers and learners who can take responsibility for their lives, their work, and their ongoing learning. It requires individuals to monitor their own work and to incorporate feedback to develop and improve their work products.

In most traditional classrooms, educators structure students' work for them, directing them in exactly what to do and monitoring compliance. To create opportunities for students to learn effectively and monitor their own progress, educators can instead work *with* them, guiding and empowering them in ways that help them take increasing responsibility for their own learning, both as individuals and in groups. In turn, this supports students' ability to function in a 21st century workplace, where people are expected to work with minimal supervision, planning their own work, designing their own work products and incorporating feedback to improve the quality of those products.

Learning activities that give students the opportunity to acquire self-regulation skills must last long enough for students to have the opportunity to plan their work over time, and offer visibility into clear learning goals and success criteria that students can use to plan and monitor their own work. Educators can foster self-regulation skills by giving students working in groups responsibility for deciding who will do what and on what schedule. In the most successful learning activities, students receive feedback that is supportive of students' progress toward clear learning goals, and they have the opportunity to act on that feedback to improve their work before it is considered final.

Self-regulation involves a range of skills that become increasingly sophisticated as they develop over time. At the beginning of a semester, students who are new to self-regulation

may need more explicit guidance; over time, it can be a goal for educators to give students progressively more responsibility for their own learning.

Big Ideas

A learning activity is considered **long-term** if students work on it for a substantive period of time. If the learning activity is completed within a single class period, there is no time for students to plan the process of their work nor to improve their work over multiple drafts. Length of time is a basic prerequisite for students' opportunity for self-regulation.

IS THIS LEARNING ACTIVITY LONG-TERM?	
YES:	NO:
Students keep a journal about their nutrition over the course of a week.	Students document what they ate on two different days.

Learning goals define what is to be learned in this activity and how these goals fit with prior and future learning.

Success criteria are the factors that will be considered to determine whether the learning goals have been met: the evidence of student progress and success in this learning activity.

When students **have learning goals and associated success criteria in advance** of completing their work, it is possible for them to examine the progress and quality of their own work as they do it. The educator might provide learning goals and associated success criteria to students, or the class might negotiate the learning goals and success criteria together to foster more student ownership. An understanding of these factors early in the learning activity is another important prerequisite for students' opportunity for self-regulation.

When students **plan their own work**, they make decisions about the schedule and steps they will follow to accomplish the task. Planning their own work may involve:

- Deciding how: Students break down a complex task into simpler sub-tasks, or choose the tools they will use.
- Deciding when: Students create a schedule for their work and setting interim deadlines.
- Deciding who: A group of students determines how to divide work among themselves.
- Deciding where: Students decide what pieces of the work will be done inside or outside of the school building or the school day.

If a task is long-term but students are given detailed instructions and timelines, they do NOT have the opportunity to plan their own work. Students making decisions about small aspects of tasks does NOT qualify as planning their own work.

	ARE THESE STUDENTS PLANNING THEIR OWN WORK?	
Learning Activity:	YES:	NO:
Over two weeks, students work in groups to research and debate climate change with their classmates.	Students decide who will research which aspects of the topic and who will speak at different points in the debate.	The educator assigns specific roles to each student.
	Students make their own deadlines for completing their research, writing their speeches, and practicing them.	Students follow the steps and timeline provided by the educator.

Students **have the opportunity to revise their work based on feedback** when feedback is given and explicitly used to improve the work before it is submitted or finalized.

Feedback may come from the educator or from peers. Students might also have the opportunity to revise their work based on their own deliberate process of self-reflection.

Feedback can be one of the most significant influences on improving learning. Effective feedback helps students to address the gap between current performance and performance goals. It is more than simple praise; comments such as 'good job' or 'great work' do little to help the student understand what constitutes great work. Effective feedback:

- Tells the student specifically what he or she is doing well and offers specific guidance to help move their learning forward
- Is directly connected to the learning goals and success criteria □ Helps the student to be more aware of progress along a learning path
- Leads to reflection and planning of next steps.

	DO THESE STUDENTS HAVE OPPORTUNITY TO REVISE WORK BASED ON FEEDBACK?	
Learning Activity:	YES:	NO:
Students learn about environmental conservation and create games in Kodu where players make decisions to preserve the environment.	After developing a beta version of their game, students trade games with a partner and give each other feedback to improve their games before turning them in.	Students post the first version of their games for classmates to play, without opportunities to receive or implement feedback.
Students create PowerPoint presentations about a topic in world history.	Students do practice presentations, receive feedback from their educator and peers, and revise their presentation based on feedback before doing a final presentation.	Students do their final presentation without any opportunity for practice, feedback, or revision.

Students write persuasive essays that will be assessed according to a rubric that the educator shared with students at the beginning of the learning activity.	Students use the rubric to reflect on their own essay drafts and make revisions.	Students use the rubric only after getting back their graded essays, to see why the educator gave them a certain grade.
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Self Regulation: Coding Rubric

- 1 Pre-requisites for self-regulation are NOT in place:
 - The learning activity is NOT long-term
 - OR students do NOT have both learning goals and associated success criteria in advance of completing their work.

- 2 The learning activity IS **long-term**
 - AND students DO have **learning goals and associated success criteria** in advance of completing their work
 - BUT students DO NOT have the opportunity to plan their own work.

- 3 The learning activity IS **long-term**
 - AND students DO have **learning goals and associated success criteria** in advance of completing their work

 - AND students DO have the opportunity to **plan their own work**
 - BUT students do NOT have the opportunity to revise their work based on feedback.

- 4 The learning activity IS **long-term**
 - AND students DO have **learning goals and associated success criteria** in advance of completing their work
 - AND students DO have the opportunity to **plan their own work**
 - AND students DO have the opportunity to **revise their work based on feedback**.

Self-Regulation: Decision Steps

