

Designing Effective Projects: Planning Projects

Assessment in Projects

Assessment Scenarios Then and Now

Twenty years ago, a typical classroom may have encompassed one of three assessment scenarios: students taking a written exam, students making oral presentations, or the teacher administering a quiz with oral questions, while students responded on paper. The teacher would teach the content, assess the students using one of these strategies, record the grade, and move on to the next unit of study.

Today's classroom reflects a very different assessment scenario. Tests and quizzes are still present but are not the sole method of assessing student learning. Instead, a variety of assessment strategies take place at multiple points in a unit of study, including:

- Teachers and students give and receive feedback in the form of peer and teacher conferencing.
- Checklists and rubrics help students understand expectations and manage learning progress.
- Self-assessments support metacognition and reflections on learning.
- Rubrics define quality for products and performances that are assessed by peers and the teacher.

Purpose of Assessment

The primary purpose of classroom assessment today is to improve learning and refine instruction. Assessment is not a solitary event but rather a continual process throughout a project. Embedded and ongoing assessment is at the heart of project-based learning and provides a means for students to show what they know in many ways. Assessment becomes a tool for improvement rather than a test of intelligence or accumulation of facts. With assessment embedded throughout a unit of instruction, teachers learn more about their students' needs and can adjust instruction to improve student achievement.

To fully take advantage of the benefits of these strategies, assessments should target specific informational goals, such as:

- how students are progressing toward learning goals
- which thinking skills students use
- whether students are improving in self-management and using reflection to improve their learning
- how well students are integrating and applying new information
- what motivates students
- the effectiveness of special interventions
- whether teaching strategies need modification

With student-centered assessment, students have more involvement in all assessment processes and need opportunities to learn and practice:

- Creating project plans, checklists, and rubrics
- Using reflection prompts to help them think about and self-assess their own learning
- Setting goals, defining tasks, predicting what will be learned
- Identifying difficulties they have in learning and considering strategies they can use to improve
- Giving and receiving feedback from their peers.

Being engaged in assessment at this level fosters feelings of control over learning and students come to see themselves as successful, capable learners.

To help students succeed, provide students with:

- Clear criteria up front
- Opportunities to monitor their own progress
- Methods for giving constructive feedback to peers and incorporating feedback from peers to improve work
- Time to reflect and improve on their processes and products
- Support in setting new goals for future learning

Assessment Goals Redefined

Traditional classroom settings offer limited assessment tools, such as test-taking and oral speeches. These methods are quick and easy, but they provide relatively limited information about a student's progress and the effectiveness of instruction within a unit. Ongoing and broader types of assessment provide more meaningful information. Specifically, use assessment tools to:

- Gauge students' prior knowledge
- Clearly define and communicate learning goals to students
- Provide diagnostic feedback to teachers and students
- Assess and improve teaching effectiveness
- Identify students' strengths and weaknesses
- Improve students' awareness of learning progress
- Engage students in self-assessment and communication of learning progress

Good projects are designed with the end in mind. This means starting with the goals, determining what students need to know, and then defining how to assess understanding. All of this is considered before activities are developed. This "backwards" approach to instructional design helps a project stay focused on learning targets. Assessment for project-based units should be planned to:

- Use a variety of assessment methods
- Embed assessment throughout the learning cycle
- Assess the important objectives of the unit
- Engage students in the assessment processes

Integrating Assessment throughout Instruction

Before beginning a project, use assessment data to determine a starting point by addressing the following questions:

- What prior knowledge needs to be addressed?
- What types of activities are required?
- How will students be grouped for collaborative learning?

During the project, use assessments with students to:

- Share learning goals and criteria
- Provide self-direction opportunities for students to set goals, make plans, and reflect on learning
- Monitor progress towards goals
- Monitor learning and understanding
- Foster peer feedback
- Identify misconceptions
- Determine if knowledge is being applied in new situations

After the project, use assessments with students to:

- Identify areas for further study
- Plan upcoming learning opportunities
- Set new goals