# Developing an Assessment Plan

It is impossible to overstate the positive impact you will notice in curricular alignment, coherence, and rigour when you follow Wiggins and McTighe's model of **backward design** (2005). There are three steps in this model:


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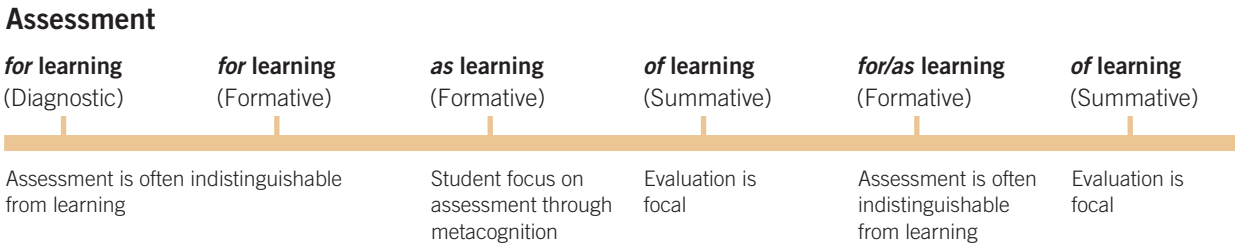
1. Clearly identify what you want students to learn in the unit.
2. Determine what evidence is going to show that students have done the learning.
3. As you design lessons, align the lesson specifics with the measures of achievement you identified in step 2.

The entire process results in a unit plan that is coherent, promotes understanding, and will save you significant time in both teaching and assessing because of the alignment and coherence built into the plan.

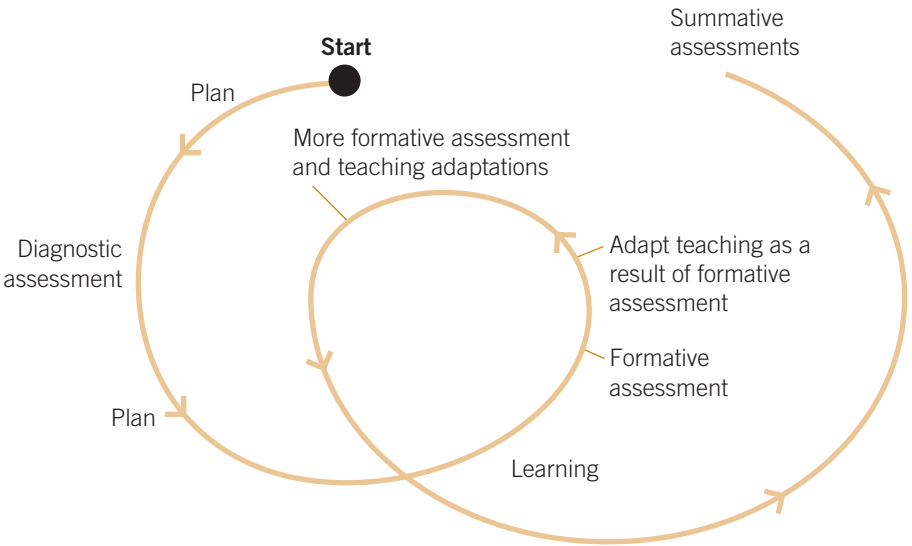
For step 2 of the backward design model, Wiggins and McTighe (2005) recommend developing assessments in a specific order:

1. Plan the assessment *of* learning (summative assessment) so that the criteria for successful achievement of the learning goals are clearly provided.
2. Early in the planning process, develop diagnostic assessments to determine student understanding, skills, and interests.
3. Plan **assessments *for* learning** (formative assessments) to determine next steps in instruction.

Reordered from the perspective of how students experience them in the classroom, the sequence looks like this:




For teachers, and for students when they are engaged in assessment *as* learning, the sequence is a feedback spiral that looks similar to this:




Your assessment plan is critical to student engagement. If your instruction and assessment promote mastery of deep learning goals, "Students seek more challenging tasks, are more persistent, make greater effort, focus on understanding, use better learning strategies, and achieve better outcomes" (Russell, Ainley, & Frydenberg, 2005, p. 24). In contrast, if your instruction and assessment encourage students to compete for a limited number of excellent grades or simply try to avoid looking incompetent, "motivation and engagement decrease, and there is an increase in superficial learning and maladaptive learning behaviours, such as cheating, work avoidance, and self-sabotaging behaviours" (ibid, p. 24).

"Assessment: the ongoing redefinition of starting points for learning"

—*Janet Allen*

## Implications for the Classroom

**Assessments *for* Learning (Diagnostic or Pre-Assessments)**

*Time-Saving Tip*: Never collect information you are not going to use. Ask focused pre-assessment questions that will reveal students' readiness, interests, and learning preferences as they relate to the unit's goals. For example, if you are going to be grouping students for learning according to their readiness to work with a particular concept, asking a specific question such as, "What are four causes of war?" will allow you to easily establish discrete groups; an open-ended question such as, "What do you know about war?" will not serve that purpose.

When pre-assessing for student readiness, use the information you gather to group learners, either in your mind or in the classroom. While you will need information about individuals in order to support each learner with appropriate challenge (see Section 4), it is important to remember that most of the differentiated instruction you provide will be based on flexible, short-term learning groups. Differentiated instruction is not individualized instruction.

If you administer pre-assessments a couple of weeks in advance of teaching the unit, you will have more time to plan, and students will have the opportunity to anticipate the content of the upcoming unit, will begin to identify its purpose and relevance, and can start making connections to their prior knowledge.

## For Example

Kenji attended a conference where he heard literacy expert Janet Allen talking about how she used student interests in her classroom. He adopted and adapted Janet's ideas. Before his students studied global warming, Kenji asked them to choose an interest from a list of options. Keith chose cars, an area of keen interest to him, and took on the responsibility of explaining to his classmates the impact of automotive technology on global warming.


Access prior knowledge by connecting to student interest.

Remember to look for strengths that students can contribute to the unit, whether expert knowledge about a particular concept, keen interest in a process, or experience with a production or performance skill. Assessments at all stages of learning and all ages of the learner should be so much more than simply a search for gaps, problems, and weaknesses.

Pre-assessments never count for grades. It is unfair to evaluate students on material you have not taught.

*Time-Saving Tip:* Group together all pre-assessment questions or activities about a particular understanding or skill. This will allow you to easily and quickly work with pre-assessment results when you are planning the unit.


**Pre-Assessing Students**

Include questions at various levels to determine which students have a concrete understanding of a topic and which students have an abstract understanding.

Where possible, make the assessment method match the learning goal. For example, if students will be asked to construct a timeline at the end of the unit, have them construct a timeline in the pre-assessment. One of the advantages of creating your summative assessment first (whether a test or a performance-based assignment) is that you can use elements of the summative assessment to construct your pre-assessment.

Be clear about whether you are assessing content, skill, or attitude. Each requires different assessment tools and each will produce a different result. For example, it is usually possible to determine that a student can or cannot perform a skill, but if you are pre-assessing understanding of the unit's big ideas, the results will have to be interpreted in terms of degrees or levels of understanding, not as a binary "understands" or "doesn't understand."

## *IN YOUR ROLE*

Make a list of pre-assessment tools and techniques you have used in the past. Create a graphic organizer to classify these tools and techniques according to whether they are useful for pre-assessing content, skills, attitudes, or various combinations of the three. (See also page 115, and *50 Tools and Techniques for Classroom Assessment*, page 126.)

**Assessments *for* Learning (Formative Assessments)**

Assessments *for* learning are intended to provide the opportunity for mid-learning correction. To serve that purpose, they should clearly tell you and your students about the progress made toward achievement of the unit goals. Indicators of progress are provided in the form of useful teacher feedback and or peer self-assessment (see *50 Tools and Techniques for Classroom Assessment*, pages 12, 70, and 126 respectively) rather than as marks, which tend to signal "end of learning" to students.

A good formative assessment and accompanying feedback provide both student and teacher with information about next steps for learning. If students are not given the opportunity to try again and keep on learning—if they are rushed to an assessment *of* learning immediately after the assessment *for* learning, or if the assessment *for* learning is marked as a contribution to a student's grade—the assessment *for* learning does not serve its intended purpose.

Formative tasks should prepare students to succeed at the summative task. Whatever is required on the summative task should be practised on the formative assessments.

Formative assessment comes in many forms. For example, it is only during the learning that you will see evidence of student engagement, attitudes, and learning skills. You are formatively assessing students when you observe and note such things as which students work independently, which ones apply the strategies you have taught, and which ones support and encourage others during group work. This information can be very helpful in providing students with another perspective on their learning, thereby giving them more information to consider during reflective and self-assessment activities.

Research shows that the more formative assessments given, the greater the achievement (Bangert-Drowns, Kulik, & Kulik, 1991). Time-saving tips to make a number of formative assessments possible include these:

- Embed formative assessments in instruction. For example, higher order questions that require students to elaborate, synthesize, apply, and evaluate their knowledge will quickly reveal a student's level of understanding (see *50 Tools and Techniques for Classroom Assessment*, page 102). Teachers, including professors at Harvard University (Light, 2001), find that exit cards (see *50 Tools and Techniques for Classroom Assessment*, page 108) are excellent at providing a snapshot of student understanding at the end of a class.

- Look for patterns of response on formative assessments so you can quickly and easily cluster students in **heterogeneous** or **homogeneous** readiness, interest, or learning preference groups.
- Provide specific verbal feedback to learners, either individually or in the learning groups you create. Feedback is more effective than marks or corrections on a student's work. (See *50 Tools and Techniques for Classroom Assessment*, pages 12–15.)
- Keep an eye on the amount of time you spend looking at student work. If, for example, you are spending more time correcting a student's work than they spent doing it, the teacher/student work equation is seriously out of alignment! At the opposite extreme, putting a mark on an assignment and expecting the student to be able to take action as a result of that mark is a waste of the time you devoted to arriving at the mark.
- Assess for transfer of learning by having students apply concepts, skills, and strategies to a new and realistic situation. A single meaningful task will allow you to formatively assess a number of learning goals.

## *IN YOUR ROLE*

On a class list, note with a check mark any communications you have had with parents about their child's achievement, and use a "+" or "–" to indicate whether that communication was positive or negative. Work toward a check mark beside each name on the list.

Share with your group your best idea for a useful formative assessment that requires minimal teacher time and effort.

### Assessments *as* Learning (Formative Assessments)

Given the significance of metacognition to learning (see pages 40–41), students should always be required to reflect on and self- or peer assess their work.

Metacognitive activities and self- or peer assessments are successful when the learning goal is clearly and explicitly stated, and when students are given the opportunity to personalize the goal according to their own needs. "The more students are involved in setting the learning goals, the more meaningful the assessment will tend to be; and the more students perceive the goals as

being imposed on them, the less meaningful the assessment will tend to be" (Johnson & Johnson, 2002, p. 13).

Teach students to establish SMART goals that are focused on what they will know and be able to do (see page 18, and *50 Tools and Techniques for Classroom Assessment*, page 7). Then, explain how the activity they are engaging in or the homework they are assigned will help them to achieve their goals. Ask students to record their goals on sticky notes and leave them on their desk as a visual reminder for them and for you.

Involving students in assessment has the following benefits:

- When students are required to assess their own and others' work against stated criteria, they internalize the criteria, have a better understanding of how to complete the assignment, and are able to provide themselves with meaningful feedback.
- Self- and peer assessment allow for a wider range of assessment modalities. For example, students can listen to each other's oral presentation or observe one another during a role-play. This supports learners of all modalities, reducing the bias inherent in a single form of assessment.
- Students have the opportunity to see how their peers completed an assessment, thus giving them ideas for their own work.

## IN YOUR ROLE

Share within the group examples of peer assessment tasks that worked well, and others that were less successful. Conclude your discussion by identifying the commonalities in each set of examples.

Discuss with your group the experiences you have had with teaching students to set goals or to personalize class goals. As a group, generate a list of successful actions for teaching goal-setting.

### Assessments *of* Learning (Summative Assessments)

Assessments of learning should take a number of different forms. The general principle is that the assessment format should match the teaching approach. This is especially important in the case of tests where, for example, students should not be asked to make fine distinctions among multiple choice options if their learning of the material did not require that level of detail.

Students should have frequent opportunities to demonstrate their understanding through an assessment format that allows them to use their learning strengths. If, for example, all assessments are essays, and the student cannot yet write essays, the resulting mark has low validity for measuring understanding. This is an issue of balance. Students do need to be able to write coherent essays and need to be taught to do so, ideally through their learning strength. However, it is also true that a balanced assessment plan includes a range of summative assessment formats so that students who are not strong in one format will not be disadvantaged.

*Time-Saving Tip:* Since you need to do several summative assessments of each overall outcome or expectation in a unit, teach fewer units.

By clearly defining the **criteria** in advance of constructing the assessment task, you will find that the task will be easier to create and will do a better job of measuring what you intend to measure. Furthermore, clear criteria allow you to create multiple tasks so that students have the choice that is so necessary to addressing their developmental needs. Finally, providing students with the criteria in advance of the assessment, or better still, co-constructing the criteria with them, helps students to understand the distinctions among the levels of achievement and take ownership of their learning (See *50 Tools and Techniques for Classroom Assessment*, pages 116–119.)

*Time-Saving Tip:* Provide students with a checklist of your expectations for their summative work. Require that they or a peer check their work against the list before submitting it for marking.

If it is possible for a student to do well on the assessment but not understand the material, or to understand but not do well, then the assessment has low validity, meaning it is not successful at measuring what it is intended to measure. A common cause for low validity is criteria that relate to the task (for example, attractiveness or neatness), rather than the learning goal.


**Preparing for Tests**

"The most important method of education... always has consisted of that in which the pupil was urged to actual performance."

*—Albert Einstein*


**Students and Rubrics**


**Co-Constructing Criteria**

### Reliable Grading

How many assessments *of* learning are required to establish a reliable **grade**? *Reliability* refers to the likelihood that a **mark** would be constant if the assessment were to be redone by the student or if someone else marked it. We can extrapolate from this definition that a reliable report card grade is established when you are confident that further assessments would simply serve to confirm your judgment. It is important to collect assessment information from a range of different tasks and to triangulate data by having a number of pieces of evidence, but there is no definitive number. Most researchers suggest a range of three to six assessments to establish a reliable grade.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While the situation is not as dire as the margin quote suggests, the fact is that it is not possible for you to "objectively" grade student understanding. Only machines are capable of grading objectively and they can do so only for correctness, not for understanding. The key is to recognize this reality, accept it as part of being human, and then make sure that the criteria you develop for an assessment are focused on the important aspects of the task, not just those that are most observable or easiest to mark.

"A grade can be regarded only as an inadequate report of an inaccurate judgment by a biased and variable judge of the extent to which a student has obtained an undefined level of mastery of an unknown proportion of an indefinite amount of material."

—***Paul Dressel***

Assignments almost always address more than one outcome or expectation. If you record marks according to assignment, you have a single number or letter that is inadequate to represent a student's understanding of multiple outcomes. Instead, I recommend the following approach:

1. Set up your mark book so that the columns are for the expectations or outcomes (see Blackline Master 3.8, Mark Book Sample). If it is easier to stay with one form of wording, you might want to use the wording of the learning goals you shared with students; in that case, cross-reference to the number of the expectation or outcome in the curriculum document (if numbers are provided, or number them yourself) so you can retrieve the formal wording if necessary.
2. When developing your assessment plan, record the summative assessments underneath each expectation addressed. If your district does not have a policy, it is not necessary to record the results of formative

assessments because they are intended to inform learning in process, and should not be included in evaluation at the end of learning. If, however, you would like to record formative assessments to have evidence of growth in learning that you can share with students, parents, and colleagues, remember to record the assignment in your mark book as "f" for "formative"; this way you will not inadvertently include these assessments in your calculation of a student's final grade for the course.

The rule of thumb for fair grading is to review a student's summative marks and determine the most consistent level of performance, with special attention paid to the most recent work. This method of determining a grade is preferable to averaging all of a student's results.

"If we did our driver's license test three times and the instructor averaged our results, many of us still wouldn't be driving!"
—*Rick Wormeli*

## IN YOUR ROLE

What are teachers to do when their district requires them to use a particular piece of software to record marks? My first response to the question is, "Who is to be master—the software company making decisions about what works from a technological or sales perspective, or the teacher making decisions based on pedagogical and assessment expertise?" (It is a leading question, I'll admit, but an honest one.) If the mark book format you are using does not meet the standards of best practice, it is the mark book that should go, not the best practice. To determine the ideal format for a mark book, consider the questions on Blackline Master 3.9 (Mark Book Questions to Consider).

For assistance in using rubric-based evaluations in determining report card grades, see Blackline Master 3.10 (Rubric Conversion).

Use Blackline Master 3.6 (Developing a Unit Plan) to work through an assessment plan for an upcoming unit.

Individually calculate the final grade for a student who receives the following ten grades during a semester or term: C, C, MA (missing assignment), D, C, B, MA, MA, B, A. Create a tally form on chart paper and list everyone's results. Doug Reeves (2008) has done this experiment with thousands of teachers and always gets the same results—final grades ranging from F to A. Discuss the implication of Reeves' findings, or your own, for reliable grading.