

# TEACHER'S CORNER – OCTOBER 2015 COLLECTING AND USING DATA

An important part of teaching is being certain that your students are learning what you teach them. Sometimes we think we have planned the most engaging, effective lesson, but then it does not work out as well as we thought it would. Other times, our students may be interested and involved in what we teach, but then they are unable to apply what they have learned. So how do we know that our students are really learning?

Collecting and using classroom data is an essential skill for any educator who wants to be sure their students are grasping the content of lessons. This month in the Teacher's Corner, we will examine some ways to answer the question, "Are my students learning what I am teaching?" First, we will look closely at lesson planning. We will consider how to guarantee that lessons have a final goal, keep students on track to meet the goal, and include different types of assessment that check for understanding. Next, we will examine some ways to collect classroom data through various types of assessment activities. Finally, we will explore how to use the data we collect to have a positive impact on student learning.



# BACKWARD DESIGN AND ALIGNMENT OF ASSESSMENTS

Great teachers spend a lot of time preparing for class. We examine our curriculum and plan our lessons, being sure to incorporate activities that will engage our students and motivate them to learn. We gather materials and even think about the exact words we will say in front of our class. We spend a lot of time thinking about how a lesson will unfold, how to make the content relatable to our students, and who will be doing what tasks in our classrooms. All of these things help us stay organized and keep learners on task, but they do nothing to answer our most important question as educators: Are my students learning what I am teaching?

#### PLANNING WITH THE END IN MIND

As educators, we have to know where we are taking our students, and we have to be sure we keep them on track to get there. In order to really set a purpose for a lesson, we have to work backwards. When we start planning, our first step must be to think about what our students should be able to do at the end of a class, a lesson, or a unit. What will they be able to do *after* we have finished teaching? What skill should they be able to demonstrate? What content should they prove that they retained?

The task or activity we use to measure this final goal is called a summative assessment. **Summative assessments** are given after a set time period of instruction and aim to determine students' mastery of content (Cabral et al. 2007, 202). Setting a final, overarching goal and measuring it with a specific assignment or task helps us be sure the activities we include along the way will help students *meet* that goal. It also gives us a way to collect data that we can use to determine if our teaching was effective and if our students learned what they were supposed to learn during a unit of study.

Let's examine the following scenario. You are teaching your primary school students about the water cycle in an English medium science class. At the end of the unit, you want your students to demonstrate understanding of the five steps of the water cycle. How will you know for sure that your students have learned this content?

Lesson planning that aims to collect data and prove that students have mastered content starts with a plan for summative assessment. For more information about effective lesson planning, view the Shaping the Way We Teach English Webinar Lesson Planning 101: Mapping Activities for a Clear Path to Learning.



#### ALIGNING SUMMATIVE ASSESSMENTS WITH LESSON GOALS

What will your students do at the end of this unit to show that they have, indeed, learned the five steps of the water cycle and know what happens during each one? Let's take a look at some possible ways of assessing what they learned. As you read these, remember the goal and decide which summative assessment does the best job of measuring whether students have met the goal.

- A. Draw an example of part of the water cycle you see in your own life. Write a few sentences to tell what is happening and which part of the cycle it is.
- B. Label the steps of the water cycle on a worksheet with illustrations.
- C. Write a paragraph about why the water cycle is important and at least five different ways you use water in your life.
- D. Arrange illustrations of each step of the water cycle correctly on a poster and label all of them.
   Write a paragraph to explain the cycle, telling what happens in each step.

If we look back at the goal, "Demonstrate understanding of the five steps of the water cycle," we can analyze each of these potential assessment activities to see if they really measure what students were supposed to learn. If we examine the wording of the goal, we can determine that the word *demonstrate* means that students should produce or do something. The word *understanding* implies that they must do more than simply remember the steps; they instead must show that they know what happens during each of the five steps.

While activity A encourages students to recognize the water cycle in the context of their own lives, it does not ask them to recall five steps or show that they know what happens during each one. The labeling exercise in activity B only measures whether students remember vocabulary, not what takes place in the steps of the water cycle. Activity C asks students to list ways they use water and why the cycle is important, which does not show that they know the steps or how the cycle works. Activity D requires students to correctly arrange the cycle, label it with vocabulary and then explain, in writing, what happens in the cycle. If students can successfully complete activity D, it will prove that they have learned the material and understand what happens in the five steps of the water cycle. Because it is aligned with the goal, activity D is the best summative assessment task to determine whether students have learned the content.



This is one example of a summative assessment activity that fits with a particular scenario. Many school districts, curriculum publishers, or education departments also create summative assessments, which are often tests. While tests can certainly provide valuable numerical data about student learning or areas for improvement, there are some more authentic tasks that also allow students to demonstrate their knowledge. Next week, we will take a look at some more ideas for summative assignment tasks, using rubrics to score them, and aligning the remainder of your lesson activities with your lesson goals.

#### Reference

Cabral, Robin, Socorro G. Herrera, and Kevin G. Murry. Assessment Accommodations for Classroom Teachers of Culturally and Linguistically Diverse Students. First ed. Boston: Pearson/Allyn and Bacon, 2007.



# SUMMATIVE ASSESSMENTS AND ALIGNING ACTIVITIES

Last week in the Teacher's Corner, we explored the idea of choosing a final, summative assessment task as the first step in lesson planning. This week, we will discuss some options for summative assessment activities, ideas for using rubrics, and how to be sure that the rest of your lesson prepares students for your summative task.

# **ESSAYS OR PROJECTS**

Asking students to write essays or create projects is a great way to provide an opportunity for them to summarize or apply what they have learned during a unit of study. In language classrooms, these two types of assignments require students to demonstrate their ability to use language structures or specific vocabulary in an authentic task.

Here is an example that incorporates arguments and the future tense. Students read articles that argue a position or state opinions and have mock debates as part of the unit. As a final assessment, they write an argumentative essay where they take a position on the use of mobile phones in the classroom. They choose a stance, for or against, and discuss three potential benefits or consequences using the future tense and the *If*, then sentence structure. In their essays, they also incorporate related vocabulary such as pro, con, advantage, disadvantage, benefit, and drawback. To assign this as a project with the same language requirements, ask students to make a poster or brochure supporting their stance.

#### PRESENTATIONS, SPEECHES, SKITS, OR COMMERCIALS

Assignments like presentations, speeches, skits, or commercials are creative tasks that ask students to incorporate what they have learned into some type of performance. They are a great way to offer students who are stronger at speaking or performing a chance to excel. These tasks can be less structured than an essay or project and allow students more creative freedom to demonstrate what they have learned. Additionally, students enjoy seeing their peers perform. Therefore, the audience can often be just as engaged in watching the performance as the presenters are in performing it! This type of assignment provides students with a chance to review information both as performers and audience members, something they would not experience by handing in an essay or taking a test.

For example, as a summative assessment for the topic of mobile phone use in the classroom, students can make a presentation or give a speech arguing for or against the use of mobile phones in the classroom.



The same requirements can still apply: students use the future tense, argue a position with three potential outcomes, use *If, then* structures, and incorporate some key vocabulary. Students can also create a commercial or skit with the same requirements.

#### **PORTFOLIOS**

Portfolios are collections of student work used to demonstrate the student's mastery of specific content. Portfolios can include classwork, homework, assessment tasks given by the teacher, peer assessments, or self-assessments conducted by the student. Pre- and post-tests, item descriptions, or student reflections may also be included.

Some portfolios aim to show student growth. These may include early assignments where it is evident that the student did not grasp the concepts being taught, and then later assignments where the student was able to perform successfully. The purpose of this type of portfolio is to show that the student's understanding of content has increased over time. Including a pre- and post-test in a portfolio of this type is a great way to show that the student has improved. An additional benefit of this type of portfolio is that it shows students their own progress over time.

Other portfolios aim to showcase a student's best work related to a certain skill or learning outcome. In creating this type of portfolio, one would likely give his/her students a choice about which items to include. For instance, if students have completed a total of fifteen assignments related to a specific learning outcome or skill, ask them to choose ten items to include in the portfolio. Depending on the age of your students, you can also assist them with making choices about what to include.

Sometimes teachers ask students to provide a description of each item in a portfolio or even a reflection about how the piece of work demonstrates their learning or growth. This can be done with any type of portfolio. Here are some sample questions for students to answer:

- How did this activity require you to show your understanding of the concept or topic?
- If you struggled with this assignment, how well do you think you would complete it now? What would you do differently?
- How does this collection of work show that you improved your understanding of the topic over time?
- Why did you choose to include these specific assignments to demonstrate your performance?



# **USING RUBRICS**

Rubrics are an excellent tool to use with summative assessment tasks such as those described above. A rubric allows you as a teacher to clearly communicate what a highly successful performance on a task looks like, therefore giving your students specific criteria to guide their completion of an assignment. Let's revisit the example of writing an argumentative essay for or against the use of mobile phones in the classroom. Based on the requirements you have given your students, start creating a rubric by thinking about what the most successful essay would include. Then, define criteria for each subsequent level of performance on the task. Here is an example rubric.

	Stance/Position	Supporting Reasons	Vocabulary Use	Future Tense	<i>If, then</i> Sentences
4	Clearly stated in introduction, aligned with reasons, consistent throughout essay.	Three reasons are given and are well discussed and supported.	9-10 of the key terms are used in the essay.	Tense is correctly used and consistent throughout the essay.	There is at least one "If, then" sentence in each paragraph.
3	Clear and consistent, but may not be stated in introduction. Well-aligned with reasons.	Three reasons are given but discussion or support needs more development.	6-8 of the key terms are used in the essay.	There are fewer than five instances where the tense is not used or is used incorrectly.	One paragraph may not contain any sentences with "If, then" structure.
2	Position may not be clearly stated or not aligned	Only two reasons are given and/or there is not	3-5 of the key terms are used in the essay.	There are fewer than ten instances where	Two paragraphs may not contain any sentences



	with one reason.	enough discussion		the tense is not	with "If, then"
		and support.		used or is used	structure.
				incorrectly.	
1	Position not	Only one reason	Fewer than 3 of	There are ten or	More than two
	stated or	or no reasons are	the key terms are	more instances	paragraphs may
	inconsistent. Not	given and the	used in the essay.	where the tense	not contain any
	aligned with two	support is not		is not used or is	sentences with
	or more reasons.	sufficient.		used incorrectly.	"If, then"
					structure.

Sharing the rubric with students before they begin their essays gives them exact criteria they must attend to in order to perform successfully on the assignment. Creating a rubric also helps you as a teacher to define exactly what student performance will look like at each level. This makes it easier to give students grades and enables you to be more consistent in evaluating their work.

#### ALIGNING LESSON ACTIVITIES WITH THE SUMMATIVE ASSESSMENT TASK

Returning to our water cycle example from last week, we know what our summative assessment task is. We want our students to be able to arrange illustrations of each step in the water cycle correctly on a poster, label them, and then write a paragraph explaining the cycle at each step. With this in mind, we can plan lessons and activities that stay focused and help our students achieve this particular goal. Take a look at the example activities below and decide which keep students on track to reach their final destination.

- Activity 1: Read aloud a book that explains how a raindrop travels through the steps in the water cycle and what happens to it along the way.
- Activity 2: Have the class brainstorm a list of different ways they use water.
- Activity 3: Have students work with a partner. Give each set of partners five pictures and five labels, one for each step in the water cycle. Have them match the labels to the pictures and arrange the cycle in order.
- Activity 4: Have students complete a word search to find vocabulary related to water and rainy
  weather. Have them check their word search with a partner to be sure they found all of the
  words.



 Activity 5: Watch a video about the steps in the water cycle. Watch it again, stopping after each step is presented. Each time you stop, have the class help you add information to an illustrated graphic organizer/chart, including descriptions of what happens at each step.

Remember, at the end of our unit, we expect that our students will be able to arrange illustrations of each step in the water cycle correctly on a poster, label them, and then, write a paragraph to explain the cycle, telling what happens in each step. If we keep this in mind, we can see that activities 2 and 4 do not align with the final goal because they do not teach students the necessary vocabulary or anything about what happens in the water cycle. While they may be related to the topic, they will not help increase students' knowledge of the steps and what happens during each one. Now, we can see the difference between activities that keep us on the route to our destination and those that could be considered wrong turns or unnecessary stops.

Moving on, we can plan our lesson or unit, possibly including example activities 1, 3, or 5 as formative assessments. **Formative assessments** are tasks or activities that provide information about what and how students are learning so that teachers can adjust instruction accordingly (Cabral at al. 2007, 202). If we see that our students perform poorly on a formative assessment task, we may need to reteach a concept or present content again in a different way.

Next week in Teacher's Corner, we will look at some easy ways to collect formative data in your classroom. This data will allow you to check your students' progress as you prepare them to succeed on your summative assessment task.

#### Reference

Cabral, Robin, Socorro G. Herrera, and Kevin G. Murry. Assessment Accommodations for Classroom Teachers of Culturally and Linguistically Diverse Students. First ed. Boston: Pearson/Allyn and Bacon, 2007.



# FORMATIVE ASSESSMENTS PART ONE

Last week, we ended the Teacher's Corner with an example of some activities that would successfully prepare students for a particular summative assessment. This week, we will explore ideas for formative assessments you can use in your own classroom. These assessments will help you collect data to check students' progress after you teach a single lesson or concept. Formative assessments are valuable because they provide data that show if students are grasping smaller concepts or skills that they need in order to build proficiency and succeed on summative assessments.

# **ANECDOTAL NOTES**

One very simple way to collect data is taking notes. Observing your students and writing down notes about what you see them doing is a great way to gather information. Watching your students work, listening to them speak during group discussions, observing how they follow steps in a process, and paying attention as they read aloud are all opportunities to see where they succeed and what they are struggling with.

Note-taking does not have to be a complicated process. You can use a regular notebook or three-ring binder and dedicate a section to each of your students. This can be organized using dividers or tabs, or simply by writing a student's name at the top of a section in the notebook. You can create a schedule and plan to observe certain students each day. Student-specific notes are helpful for uncovering repeated mistakes made by students and/or their improvement. For example, you notice that some of your students continually omit inflectional endings such as –ing, –s, and –ed when they read aloud. Once you plan activities to bring this to their attention and allow them to practice, you can use your notes to be sure they consistently read the inflectional endings. A table similar to the one shown below is any easy way to organize student-specific notes in any subject.

Student Name:						
Date	Strengths	Areas for Improvement				



Notes do not have to be linked to a particular student to be helpful. Teachers can also take notes about the entire class by circulating around the room and writing down any information they find useful. For example, you observe your students changing singular nouns to plural and notice that many of them add —s to nouns that end in —y. General notes like these can help you determine what your class needs to review. In this instance, your notes show that your students do not understand the rules for changing singular nouns that end in —y to the plural form. Now you can reteach the rules and provide your class with additional practice.

Taking notes about the things your class does well is also useful. When students successfully apply what you have taught, you can determine the concepts and skills they have mastered. This helps you decide when they are ready to move on to new material. You can also use your notes to give your class positive feedback such as verbal praise. Another idea is to keep a list of things students do well posted somewhere in the classroom and add more of their strengths to the list as you observe them.

#### **CHECKLISTS**

Checklists can be used for a variety of assessment tasks. They are especially helpful in determining areas of weakness for performance tasks like presentations, or written work like essays and compositions. For instance, you have given your students a major assignment where they must research a topic and present it to the class. A checklist of presentation skills, like the one shown below, is an excellent assessment tool because it communicates the exact criteria students need to address in order to succeed.

Presenter Name:		Reviewer Name:	
Presentation Skill	Does the presenter do this?		Write some notes about what the presenter did well, or ideas about how the presenter could improve his/her skills.
	Yes	No	
Speak clearly			

Use appropriate volume		
Speak with appropriate speed		
Make eye contact while speaking		
Stay within time limit		

As a formative assessment, have students practice their presentation in pairs. The partners can use the checklist to give each other feedback on what they still need to improve. Additionally, you can collect the checklists, analyze them, and determine if a portion of your class needs further instruction on a specific presentation skill. By using the data, you can plan to review the skill that your students need to work on most.

Similarly, you can adapt the above checklist to give students feedback on written work like essays and compositions. The checklist should consist of the skills you want them to include in a composition, such as a specific tense, certain vocabulary, an introduction, three body paragraphs, and a conclusion. Use the checklist to formatively assess these skills, give feedback, or review the topics where the class shows the most weakness.

#### **EXIT TICKETS**

Exit tickets are short assessments designed to quickly assess whether students have learned the content from the lesson in which they just participated. These assessments are given at the end of the lesson and are often handed in as a "ticket" to leave the classroom or transition to the next activity. Many teachers distribute index cards, sticky notes, or half sheets of paper for students to use to complete these tasks. Below are some examples of the different types of exit tickets that teachers use.



learned, sometimes with added illustration	ns.			
The four stages in the life cycle of a butterfly are, and,				
Draw the stages in order:				
<ul> <li>Words orally dictated by the teacher for students to write. This type of exit ticket is used to te students' mastery of a particular spelling pattern or phonics skill. In this example, students have to write words such as blue, black, blade, brick, bring, and bright to demonstrate their ability to use the two blends shown below.</li> </ul>				
bl-	br-			
, <del></del>	_			
<ul> <li>Sorting words according to grammar or spelling rules. In this example, students have to place singular nouns branch, fox, baby, family, lunch, supply, class, and dish in the correct category according to the ending of the plural form.</li> </ul>				
<u>-es</u>	<u>-ies</u>			

• Sentence frames or sentence starters that require students to fill in key parts of the content they

A

Additional types of exit ticket assessments include:

- Sequencing events or steps in a process
- Defending one's position on a key issue using evidence from the lesson
- Answering 1-2 multiple-choice questions on a topic
- A cloze paragraph on a topic, with or without a word bank
- An oral answer to a question posed by the teacher (to individual students)
- Sorting content-based information into learned categories depending on characteristics
- Employing a specific language structure or grammar rule to respond to a prompt orally or in writing
- Using new vocabulary correctly in a response

Exit tickets should be short and measure the skill or content you presented in your lesson. You can determine if your students learned what you taught by examining whether they are able to successfully complete the exit ticket. If they do not succeed, you should plan to reteach the material.

Next week in the Teacher's Corner, we will examine three more ways to incorporate formative assessments in your classroom. In addition, we will discuss how to use data from these assessments to help your students.



# FORMATIVE ASSESSMENTS PART TWO AND USING DATA

So far this month in the Teacher's Corner, we have discussed aligning lesson goals with assessments, types of summative assessments, and a few formative assessment ideas. This week we will conclude by exploring three more types of formative assessments and how to use data to have a positive impact on student learning.

#### **STUDENT SELF-ASSESSMENTS**

One great way to examine student progress is to train students to assess themselves. There are many advantages to having students reflect on their learning process and their performance in class. Students may know that they are struggling because they are unable to complete exercises or are confused when asked to perform tasks in class. A benefit of self-assessment is that it forces students to acknowledge when they are having trouble and need more practice. After students consider their performance, you can have them share their self-assessments in a variety of ways.

Guiding students to reflect honestly can take some practice. At first, some students are afraid to admit they need help and/or inflate their ratings of how well they understand things. However, asking students to examine how closely their self-assessments align with their performance on tasks like quizzes and tests will help them see the benefits of being honest about their learning process. Another important element of successful self-assessment is creating a classroom culture where students feel comfortable asking for assistance and support each other's learning.

Consistently using one self-assessment method can help make the process more intuitive for students. Helpful strategies are discussed below, and you can find additional ideas in the *English Teaching Forum* article Using Self-assessment for Evaluation.

#### **Response Cards**

You can create response cards for each of your students to keep in his/her desk, notebook, or school bag. Some teachers use colors for students to show how well they grasp content. For example, green indicates the student fully understands, yellow means they need more examples or practice, and red means they do not understand at all. Instead of colors, you can use a smiling face, a neutral face, and a frowning face to indicate these same levels of comprehension. After you pose a question or give students a task to



complete, ask them to show the card that corresponds to their level of understanding by holding it up, or displaying it on their table or in their laps. By looking around at the response cards, you get instant data to guide your instruction. You can adjust your teaching by adding more practice, reviewing the concept in the next class period, or moving ahead if your students are ready.

# **Signals**

Hand signals are another great way for students to communicate their self-assessments. A thumb pointed downward can indicate lack of understanding, a thumb parallel to the floor can show a need for more practice, and a thumb pointed upward can demonstrate that a student feels confident about a concept. Similarly, the scale below, starting with a fist and ending with four fingers can show a student's level of understanding.

Rating:	0	1	2	3	4
How to	Student holds	Student holds	Student holds	Student holds	Student holds
display:	up a closed	up one finger.	up two fingers.	up three	up four
	fist.			fingers.	fingers.
	I have no	I have heard of	I have some	I know a good	I can explain or
What it	understanding	this concept or	knowledge of	amount about	teach this
indicates:	of this concept	skill.	this concept or	this concept	concept or skill
	or skill.		can use this	and/or can	to someone
			skill in some	apply this skill	else.
			situations.	most of the	
				time.	

#### **PEER ASSESSMENTS**

You can collect data by asking students to assess one another. Students often enjoy receiving feedback from someone other than their teacher and may be more open to ideas from a classmate. Peer assessment also trains students to recognize what successful work looks like. Peer assessors can learn about their own performance if they see examples of success or areas for improvement in the work they are evaluating.



You can assign partners to examine each other's work, or collect assignments and randomly distribute them to the class. Multiple peers can assess the same assignment to offer different perspectives. The most important part of asking students to take on the role of assessor is that they must have established guidelines and criteria for rating or grading their classmate's work. This could be a checklist or rubric similar to those presented in Week 3 of October's Teacher's Corner, or a rating scale. Students must know what they are looking for, what constitutes successful completion of a task, and what indicates a need for improvement.

Peer evaluation can be highly effective when used as a formative assessment because it allows students to get feedback and improve their assignments. Teachers can examine checklists, rubrics, rating scales, or notes between peers to identify areas where students need further instruction or guidance.

#### **UTILIZING DATA**

After giving students a formative assessment, you can use the data to determine the effectiveness of your teaching. If all students successfully completed the task, proceed with the next lesson. If no students successfully completed the task, you need to reteach and consider a new way to present the content. Of course, situations where *all* students perform exactly the same way on an assignment are highly unlikely in a real classroom! Formative assessment data can help us identify specific students that need review or additional practice, and help us improve their performance.

#### **Small Group Support**

You can use data from formative assessments to form small groups of students who may need additional instructional support. If the assessment measures specific skills or standards, the data will show you exactly what you need to reteach. Record data in a table like the one below and form review groups after you score assessments. Use independent work time or organize a tutoring session to reteach the content and provide more practice to students who need it.

Assignment Topic: Past tense verbs		Date: September 25th		
Question Number	Learning Standard or Skill Addressed	Correct Responses	Incorrect Responses	Students Needing Review
1	regular verbs in past	27	5	Fatima, Maria, Kenji, Fin,

	tense (-ed)			Mattias
2	irregular verbs in past tense	3	30	Whole class review/practice
3				
4				
5				

After you provide additional instruction to students, check their understanding again to be sure they have improved. You can give them the same assessment they took the first time, or develop a new one that measures the same skill. The important thing is that students are able to apply what they have learned and complete the task successfully.

#### Peer-to-Peer Assistance

Formative assessments can yield unique opportunities for students to support each other in the classroom. For example, use a peer assessment checklist to assess your students' progress on an essay. Some students perform very well on certain parts of the essay, while others do not. When it is time for students to revise the essays, pair or group students with different strengths so they can benefit from each other's feedback.

Accurate self-assessments can also create opportunities for peer support in your classroom. Students who understand a concept can assist those who need more practice. Sometimes learning from a classmate, rather than the teacher, can help students grasp material they have struggled with in the past.

When using peer-to-peer assistance, remember that it should not replace your teaching. Asking the same students to take on a helping role too often can put a strain on classroom relationships. Situations where classmates can support each other simultaneously are the best use of this method.



# **Challenging Successful Students**

Formative assessment data can also help you challenge successful students by creating enrichment opportunities. You can give them assignments that require them to apply what they have learned to new situations. Below are some ideas for activities you might use with high-performing students.

- Have them create their own exercises or a game on the topic
- Let students read a novel independently and conduct a book club (See <u>Literature Circles as</u>
   Support for Language Development from *English Teaching Forum* for ideas.)
- Ask them to create a piece of writing using a new skill or structure
- Require them to apply a process to new types of problems or multi-step problems
- Allow students to read books on the topic and complete graphic organizers
- Let them choose a topic to research and plan a presentation, poster, brochure or report
- Give students learning games related to the topic