Teachers need to assess students’ understanding of what they are learning and then use that information to adjust instruction. Remember, assessment does not mean a “test”—there are many different ways to learn about student strengths and weaknesses, identify specific learning needs, and collect feedback on the effectiveness of instruction.

Providing formative classroom assessment is important for meeting student achievement goals. The more a teacher knows about what the students know and don’t know, the better the teacher can change instruction to address student learning needs.

References to documents are for corresponding tools in the Toolkit.

### ASSESSING BACKGROUND KNOWLEDGE

1. **Pre-test**

   Pre-tests provide valuable information about a student’s prior knowledge and areas of strengths and weaknesses. Pre-tests allow teachers to tailor instruction to student learning needs.

   *See Pre-test Analysis Grid, Document #2.*

2. **KWLs**

   A KWL is a technique used by teachers to assess what students "know," "wish to know," and "have learned about a particular topic," using a sheet divided into three columns labeled K, W, L. Used at the beginning of a lesson, the KWL serves as a written record of the students’ prior knowledge (K) on the topic, and allows the opportunity for students to note what they desire (W) to know about the topic. Following the lesson, the students can self-assess what has actually been learned (L) about the topic.

   *See KWL Organizer, Document #3.*
3. Comparison Charts

Comparison charts are a type of graphic organizer. They involve the examinations of similarities and differences among ideas, events, characteristics, etc. Comparison charts may take a number of forms and are an excellent way to engage students individually or in groups as they seek to focus on characters, events, or themes within a single story or compare books, events, or properties within a given theme. Examples include Venn diagrams, matrixes, webs, flow charts, etc.

See Analogy Organizer, Document #4.
4. Investigations

Investigations may be related to a specific subject area or may involve several areas, integrating curriculum. The most typical form of investigation is a collection of student writing, diagrams, graphs, tables, charts, posters, experiments, and other products. When students become involved in practical or mathematic investigations, assessment activities and/or questions can be presented to students without their awareness of any difference between the assessment and instruction.

5. Bell Ringers/Flashback

Bell Ringers and Flashbacks are popular review tools. Before a class or lesson begins, the teacher gives students about 5 questions that review content. The questions are usually fill-in-the-blank, multiple choice or short answer. The teacher can collect these daily to see where content knowledge is lacking and provide appropriate re-teaching.

Bell Ringers and Flashbacks need to be a purposeful review of important content, not just busywork for the beginning of class.

See Flashback organizer, Document #5.
6. Journals and Logs

Journals and logs are places where students record important information, express personal reactions, and to wonder about new knowledge, events, themes, and ideas. Teachers may use these writing tools to respond to each child individually, sharing their questions, feelings, and ideas and making suggestions for future work or related activities. Some teachers hold individual conferences with their students and use journals and logs as part of the conferences.

Examples include:

- Literature response journals
- Reading logs
- Personal writing journals
- Dialogue journals
- Learning logs

Students use these for jotting down:

- Achievement targets they have mastered
- Targets they have found useful and important or are having difficulty mastering
- Learning experiences that worked well or that did not work for them
- Questions that have come up along the way with which they need help
- Ideas for important study topics or learning strategies that they might like to try in the future.
- Sentence starters to generate reflections

7. Reflective Paragraph

Reflective paragraphs may be assigned as in-class review or homework to provide students with practice in writing well-constructed paragraphs.


Whole Group Activities/ Responses

8. Response Groups

Response groups provide opportunities for small numbers of children to discuss books or events in depth with one another. Often, children organize and run these groups because they have read the same book or experienced the same event and want to discuss it. Teachers participating in a response group will gain insight into their students’ thinking skills, group behaviors, and affective characteristics. To retain insight of student learning, it is important to provide students with note-taking forms or checklists that will be turned into the teacher.

See an example of a student response form, Document #6.
9. Oral Assessing of Understanding

The following are keys to successful use of oral questioning as an assessment device:

- Plan key questions in advance of instruction to ensure proper alignment with the target and with students’ capabilities.
- Ask clear, brief questions that help students focus on a relatively narrow range of acceptable responses.
- Probe various kinds of reasoning, as appropriate.
- Ask questions first and then call on someone to respond. This keeps all students on their toes.
- Call on both volunteers and non-volunteers. This, too, keeps all students in the game.

After posing a question, wait five seconds for a response. Giving students time to think before answering increases desirable outcomes – the number and length of responses, the quality of responses, student confidence, and student and teacher attitudes and expectations.

10. Instructional Questions and Answers

As instruction proceeds, pose questions for students to answer, or ask students to question each other. This practice encourages thinking, deepens learning, and provides information about the learning. Teachers listen to answers, interpret them (either by means of internally held standards or a written rubric), infer the student’s level of attainment or misconceptions, and act accordingly. Questions may be used to assess student understanding and misconceptions, and to encourage thinking and deepen learning.

11. Graffiti Walls

Graffiti walls are free form spaces for brainstorming and communicating words, phrases, or ideas on a topic. These are often used as evolving records. A teacher may use them to facilitate brainstorming on a particular theme at the beginning of a unit, as well as encourage students to add new words or phrases relating to the theme as the unit progresses. In addition to encouraging children to search for new and interesting words, the graffiti wall serves as a class dictionary/thesaurus for students to reference enriching their writing.
12. Interviews and Conferencing

An interview provides an opportunity for the teacher to determine the student’s depth of understanding rather than measure whether the student can provide the “correct” answer. Questioning may follow a period of observation to discover if the student’s perception of a situation is the same as the observer’s.

Conferencing with a student individually will help the teacher understand their student’s knowledge and thinking, as well as learn more about how the student learns best and what motivates learning. Conferences don’t have to be long. An informative discussion can occur at a student’s seat in just a few minutes. Teachers should take simple notes of what they learn in their conferences, so they can use that information to improve the learning for that student. Conferences also build important relationships between the student and teacher.

The following are keys to successful use of conference and interview assessment formats:

- Carefully think out and plan questions in advance. Remember, students can share in the preparation.
- Focus on particular learning targets.
- Plan for enough uninterrupted time to conduct the entire interview or conference.

Be sure to conclude each meeting with a summary of the lessons learned and their implications for how you and the student will work together in the future. Let the student summarize, if appropriate.

When implementing strategies 13 through 16, it is important that teachers assess student learning by listening to discussions and responses. Sometimes teachers may want to take anecdotal notes and record information that reveals whether or not the students are learning the intended content. By being active facilitators, teachers can gain valuable knowledge that can be used to redirect the activity or guide future planning.

13. Envoying

When children are involved in group discussion, one child from each group moves on to the next group after a given period of time. On arrival, they have one minute to summarize the key points from their previous group. The receiving group has one minute to explain their thinking to the newcomer. This rotation occurs at set intervals.

14. Information gap

Groups split into two sub-groups; each sub-group is given one half of some information about a topic; sub-groups have to talk to draw the information together.
15. Snowballing

Talking partners form groups of four and take turns explaining their ideas to each other. Fours can then become eights, and so on.

16. Human Graphs

Students respond to a statement by forming a human graph. For example, ask the question, “Can all forms of physical change on the Earth’s surface be measured?” Students form three lines to represent their thinking - Agree, Don’t Know, Disagree. After selecting a line, students turn to a partner and explain why they selected that particular line. Then one person from each line explains to the whole group why he/she chose that line. Having heard all the explanations, students may change lines. Finally, take note of the final graph and send the students back to their seats.

Reflection & Self/Peer Assessment

17. Goal Setting

Setting goals with children provides the basis for monitoring student performance through collaboration and self-reflection.

18. “I Learned” Statements

“I Learned” statements may be in either written or oral form. Their purpose is merely to give students a chance to self-select one or more of the things they learned during a class session, an investigation, or a series of lessons.

19. Peer Evaluations

Peer evaluations consist of student analysis and assessment of peer proficiency using either established or self-generated criteria. An activity must be very carefully structured if students are to receive valid feedback from their peers.

20. Self-Evaluations

A key concept in alternative assessment is having the student learn to recognize his/her own progress by taking the time to reflect. Students who are able to review their own performance, explain the reasons for choosing the processes they used, and identify the next step, develop insight and self-involvement. Self-reflection, an important concept in any form of assessment, is a particularly important component of a
student portfolio.
<table>
<thead>
<tr>
<th>Quick Assessment Checks</th>
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<tbody>
<tr>
<td><strong>21. Fist of Five</strong></td>
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<tr>
<td>Ask, “How well do you know this information?” Students show the number of fingers on a scale, with 1 being lowest and 5 the highest.</td>
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<tr>
<td>5. I know it so well I could explain it to anyone.</td>
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<tr>
<td>4. I can do it alone.</td>
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<tr>
<td>3. I need some help.</td>
</tr>
<tr>
<td>2. I could use more practice.</td>
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<tr>
<td>1. I am only beginning.</td>
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<tr>
<td><strong>22. Thumb It</strong></td>
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<tr>
<td>Have students respond with the position of their thumb to get an idea of their understanding of a topic being studied. Ask the questions: “Where am I now in my understanding of _________?”</td>
</tr>
<tr>
<td>Thumb up – “I know a lot.”</td>
</tr>
<tr>
<td>Thumb sideways – “I know some.”</td>
</tr>
<tr>
<td>Thumb down – “I know very little.”</td>
</tr>
<tr>
<td><strong>23. Yes/No Cards</strong></td>
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<tr>
<td>Ask the students a series of questions and they respond by holding up a yes or no card. You could ask questions about content knowledge or ask about their understanding of the content.</td>
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<tr>
<td><strong>ASSESSING POST INSTRUCTION</strong></td>
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<tr>
<td><strong>24. Oral Examinations</strong></td>
</tr>
<tr>
<td>Plan and pose questions for students, who reflect and provide oral responses. Listen to and interpret the responses, evaluate quality and infer levels of achievement. This is similar to an extended written response assessment.</td>
</tr>
<tr>
<td><strong>25. Quiz</strong></td>
</tr>
<tr>
<td>The quiz can be planned or a pop quiz, but it makes the most sense to use it for diagnostic purposes and not to give a grade. Data from quizzes can provide</td>
</tr>
</tbody>
</table>
information to regroup students for re-teaching.

26. Exit Slips, also called Exit Tickets

During the last five minutes of class, the teacher gives the students slips of paper with space for writing. One or two questions are written on the board for students to answer. The teacher collects slips as students leave class. The teacher reviews the student responses to learn how many students got the big idea and what kinds of misunderstanding exist. Lessons for the next day are adjusted to address student needs.

See Exit Slip example, Document #7

Products and Projects

27. Demonstrations

A demonstration transforms ideas into something concrete and observable through visual, audio, art, drama, movement, and/or music. This could also include opportunities to demonstrate and explain procedures and strategies such as a science experiment or a solution to a non-routine math problem.

28. Products

Student products represent completed student work in a variety of forms; writing, videotapes, audiotapes, computer demonstrations, dramatic performances, bulletin boards, debates, etc. Students can demonstrate understanding, application, originality, organizational skills, growth in social and academic skills and attitudes, and success in meeting other criteria.
### PREDICTING KCCT

#### Standardized Tests

<table>
<thead>
<tr>
<th><strong>29. Measures of Academic Progress (MAP)</strong></th>
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<tbody>
<tr>
<td>MAP is a state-aligned, diagnostic assessment that measures student progress over time. It is available for reading, language arts, math, and science. It adjusts to each student’s performance level. The results help teachers make data-driven decisions about teaching for learning. For more information, go to <a href="http://www.nwea.org/stystem.asp">www.nwea.org/stystem.asp</a>.</td>
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<tr>
<th><strong>30. KCCT-like Assessments</strong></th>
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<tr>
<td>KCCT-like Assessments can be used in a variety of ways to inform instruction and prepare students for the Kentucky Core content Test. When the KCCT template is used on a regular basis to give multiple-choice and open-response questions, there are no surprises for students in the spring. Use the KCCT template for quizzes, unit tests and cumulative assessments. Review quality responses with the class and give students the opportunity to improve their work to a four (complete and clear understanding). To determine each student’s performance level (novice, apprentice, proficient, or distinguished) on a KCCT-like assessment, enter the multiple-choice and open-response scores into a goal calculator. Use this information to set individual and classroom goals with students.</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:**

- *Source: Formative Assessment in Action: Weaving the Elements Together, by Shirley Clarke, 2005, Hodder Murray*
- *Baltimore County Public Schools — http://www.bcps.org/*
- *KASC Differentiating Instruction Workshop*