

This document provides a summary of Recommendation 6b from the WWC practice guide *Organizing Instruction and Study to Improve Student Learning*. Full reference is on the last page.

CONTENT General

GRADE LEVEL(S) K-12

LEVEL OF EVIDENCE Low

Recommendation

Use tests and quizzes to identify content that needs to be relearned.

Learners typically cannot accurately judge how well they will remember information they have previously studied (e.g., content read from texts). Being unable to accurately predict what has been learned negatively affects students' ability to implement effective study strategies.

Quizzes may help students identify which items are not well learned, and thus enable more effective allocation of study time. For example, quizzes improve the learning of foreign vocabulary words better than extra study or review time. Similarly, rereading material produces more gains in learning when a test is interposed between the reading sessions.

How to carry out the recommendation

1. Teachers should provide “closed-book” quizzes after presentation of material to provide students with the opportunity to check their learning.

South Carolina standards alignment

TEACHERS: P.SW.1, P.SW.2, P.A.1, P.A.2, P.A.3, P.A.4, P.A.5

ACADEMIC STANDARDS: ELA.K-12.I.5, M.K-12.MPS.C.1, SCI.K-12.S.1

Use a quiz right after the presentation of new material. Quizzes can be either oral or written; in addition, they can be formal or informal (e.g., games in class). These

quizzes do not need to be graded, they are being given for the purpose of student self-assessment. Ask students to rate their confidence in their answers (see the cue-only delayed judgment of learning procedure) and then provide the answers, allowing students to assess how well they not only know the material, but how accurate their judgement is. Then ask students to identify the areas that need to be studied further. Provide opportunities for students to personalize further study based on the results.

2. Use “spot checks” at the beginning of a class session with a very short quiz on the previous night’s reading assignment or on material covered during prior class sessions.

South Carolina standards alignment

TEACHERS: P.SW.1, P.SW.2, P.A.1, P.A.2, P.A.3, P.A.4, P.A.5

ACADEMIC STANDARDS: ELA.K-12.I.5, M.K-12.MPS.C.1, SCI.K-12.S.1

Administer a quiz at the beginning of a class session to assess content from homework or from the previous class session. This can be done as “board work” (work for students to do when they first enter the classroom), or as a formal first activity. Immediately following the quiz, the teacher should elicit correct responses from the class and explicitly tell students that if they did not know the correct answer, they should study specific pages in their text where the answers can be found. Spot checks can also include a question that was previously covered several weeks ago.

Even though the spot check is a closed-book quiz, teachers can identify the pages in the text that pertain to the question so that students can easily find the material that needs to be studied. The basic principle is to use quizzes to help students more accurately identify the material and concepts that they need to study further.

Potential roadblocks and how to address them

Roadblock	Suggested Approach
<i>A teacher might object that there is not enough class time available for quizzing and testing—that he or she will end up having to sacrifice content in order to make time for this.</i>	Some of this quizzing can be completed as homework. Students can be encouraged to make use of online self-checking quizzes that are frequently available on websites tied to textbooks. These websites grade the quizzes immediately, and often identify pages in the text where the concept, principle, or skill was taught, or where the students can locate a worked example.
<i>A teacher might object that there is already an overemphasis on testing in the school system.</i>	Typically, testing in schools involves using tests to assign grades or using standardized tests to assess students' achievement. That is, tests are used to assess what a student knows. The testing recommended here is to help students better identify what they have <i>not</i> learned, so that students can more effectively guide their study for material not yet mastered. It is important for teachers to help students re-envision quizzes as tools to help them learn, rather than as tools used to evaluate their performance.

For more information on the research evidence and references to support this recommendation, please refer to sources cited here:

Pashler, H., Bain, P., Bottge, B., Graesser, A., Koedinger, K., McDaniel, M., and Metcalfe, J. (2007) *Organizing Instruction and Study to Improve Student Learning* (NCER 2007-2004). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ncer.ed.gov>.