Principles of Learning and Teaching: Grades 7-12 (0524)

Discrete Multiple-Choice Questions

Directions: For each question, select the best answer and mark the corresponding space on your answer sheet.

1. Which of the following is something that should almost always be discussed with students when they are given a type of assignment that may be new to them?
   (A) Whether the students will be tested on the material covered in the assignment
   (B) Whether the assignment will be graded according to the same criteria as other assignments with which the students are familiar
   (C) What the students can expect to learn from doing the assignment
   (D) What kind of prior experience the teacher has had with this type of assignment

2. A teacher gives his students a list of terms to use in an essay and intends the list to serve as a kind of learning support called a scaffold. If the students use the list effectively, which of the following would be an appropriate next step for the teacher to take when assigning the students their next essay?
   (A) Asking the students to come up with their own list of terms to use in the new assignment
   (B) Giving the students a longer list of terms to use in the new assignment
   (C) Giving the students a list of terms and asking them to write down a definition of each before beginning the new assignment
   (D) Asking the students to use the same terms in the new assignment

3. A high school teacher is trying to help nonfluent speakers of English understand an English text. During the class, the teacher asks the students to read aloud and focuses on correcting errors in pronunciation. Which of the following is a principle of second-language development that this approach fails to take into account?
   (A) For most nonfluent speakers of a language, the fastest way to learn the language is to imitate the way native speakers speak it.
   (B) Reading skills have to be well established before a student of a language can learn a language.
(C) Nonfluent speakers of a language can understand what they are reading before they can accurately pronounce all the sounds in the language.

(D) Students should not attempt to read aloud before they can read grade-level texts silently with understanding.

4. The concept of the placement of students in the “least restrictive” educational environment developed as a result of efforts to
   (A) equalize educational opportunities for females and minorities
   (B) normalize the lives of those children with disabilities who were being educated in isolation from their peers
   (C) obtain increased federal funding for the noneducational support of children living in poverty
   (D) reduce the overall costs of educating students with special needs

5. A tenth-grade student feels overwhelmed by an assignment to write a term paper on an assigned topic. The teacher’s advice is to approach the task by breaking it into smaller subtasks with which the student has more experience. Which of the following activities is most consistent with this method?
   (A) First writing on a topic that is familiar and then adding material about how this topic is related to the assignment
   (B) Preparing a bibliography of books and articles about the topic
   (C) Finding two sources of information on the topic and reading each to see what they have in common
   (D) Drafting a paper and reading it aloud to a friend to determine which parts need to be revised to be made more intelligible

6. A teacher would get better information from a criterion-referenced test than from a norm-referenced test about which of the following?
   (A) How much each individual student has learned about a particular aspect of the curriculum
   (B) How each individual student’s knowledge of a particular aspect of the curriculum compares to that of students across the school district and state
   (C) How each individual student’s knowledge of a particular aspect of the
curriculum compares to that of a national sample of students at the same age level

(D) How much of what each student knows about a particular aspect of the curriculum is based on prior knowledge

Questions 7 and 8 are based on the following passages.

The following passages are taken from a debate about the advantages and disadvantages of a constructivist approach to teaching.

Why constructivist approaches are effective

The point of constructivist instruction is to have students reflect on their questions about new concepts in order to uncover their misconceptions. If a student cannot reason out the answer, this indicates a conceptual problem that the teacher needs to address. It takes more than content related professional expertise to be a “guide on the side” in this process. Constructivist teaching focuses not on what the teacher knows, but on what and how the student learns. Expertise is focused on teaching students how to derive answers, not on giving them the answers. This means that a constructivist approach to teaching must respond to multiple different learning methods and use multiple approaches to content. It is a myth that constructivist teaching never requires students to memorize, to drill, to listen to a teacher explain, or to watch a teacher model problem-solving of various kinds.

What constructivist approaches take advantage of is a basic truth about human cognition: we all make sense of new information in terms of what we already know or think we know. And each of us must process new information in our own context and experience to make it part of what we really know.

Why constructivist approaches are misguided

The theory of constructivism is appealing for a variety of reasons—especially for its emphasis on direct student engagement in learning. However, as they are implemented, constructivist approaches to teaching often treat memorization, direct instruction, or even open expression of teacher expertise as forbidden. This demotion of the teacher to some sort of friendly facilitator is dangerous, especially in an era in which there is an unprecedented number of teachers teaching out of their fields of expertise. The focus of attention needs to be on how much teachers know about the content being taught.
Students need someone to lead them through the quagmire of propaganda and misinformation that they confront daily. Students need a teacher who loves the subject and has enough knowledge to act as an intellectual authority when a little direction is needed. Students need a teacher who does not settle for minimal effort but encourages original thinking and provides substantive intellectual challenge.

7. The first passage suggests that reflection on which of the following after a lesson is an essential element in constructivist teaching?

(A) The extent to which the teacher’s knowledge of the content of the lesson was adequate to meet students’ curiosity about the topic
(B) The differences between what actually took place and what the teacher planned
(C) The variety of misconceptions and barriers to understanding revealed by students’ responses to the lesson
(D) The range of cognitive processes activated by the activities included in the lesson design and implementation

8. The author of the second passage would regard which of the following teacher behaviors as essential for supporting student learning?

(A) Avoiding lecture and memorization
(B) Allowing students to figure out complex problems without the teacher’s intervention
(C) Emphasizing process rather than content knowledge
(D) Directly guiding students’ thinking on particular topics

Answers

1. The best answer is C. The consensus among educational researchers is that students will learn only when motivated. To be motivated to learn, students must find academic activities meaningful and worthwhile and work toward learning goals (to gain knowledge and master skills), not merely toward performance goals (to appear capable in the eyes of others). By discussing learning goals with the students, the teacher helps them have motivation to learn.

2. The best answer is A. A scaffold is a temporary learning aid, designed to help the student to grow in independence as a learner; thus, once the skill the scaffold is
intended to help teach has been mastered, the scaffold should be withdrawn. Asking the students to come up with their own list of terms to use in the new assignment in effect withdraws the scaffold and encourages independence. None of the actions described in the other answer choices does these things.

3. **The best answer is C.** Formal accuracy in pronunciation should not be required initially or be expected in the beginning stages of language development. Learning should focus initially on comprehension rather than on correct and incorrect usage.

4. **The best answer is B.** The concept of “least restrictive” stems from P.L. 94-142 and subsequent legislation regarding the education of students with disabilities and implies that special students are not to be classified by disability and given permanent special placement on the basis of these classifications. Rather, they are to be moved to special settings only if necessary and only for as long as necessary.

5. **The best answer is C.** A large task is more easily accomplished by breaking the task into smaller parts. Choices A and D involve writing a paper first, which is exactly what the student finds insurmountable. Choice B may also be too large or too unfamiliar a task for the student to be successful.

6. **The best answer is A.** Criterion-referenced tests are developed to assess knowledge and understanding of specified standards for learning particular content. They are designed to enable individual students or groups of students who have studied the same material to assess how much they have learned as compared to the criterion, or standard. A normgroup performance is not required for a criterion-referenced test, since the goal is to measure knowledge against predefined knowledge standard. Whether a person passes a criterion-referenced test is not judged in relation to how other applicants performed (which would be normreferenced) but in relation to an established standard for minimum number correct.

7. **The best answer is C.** Constructivist teaching depends on the connection of new information to already learned information or understandings, whether or not they are accurate. The passage says, “The point of constructivist instruction is to have students reflect on their questions about new concepts in order to uncover their misconceptions. If a student cannot reason out the answer, this indicates a conceptual problem that the teacher needs to address.” Thus, a consideration of barriers and/or misconceptions in response to the presentation of new material is an essential follow-up to a constructivist lesson.
8. **The best answer is D.** The second author maintains that students require teacher guidance and a direct expression of the teacher’s expert content knowledge in order to learn most effectively. Choices A (avoiding lecturing), B (learning without teacher intervention), and C (de-emphasis on content knowledge) are not consistent with this approach to teaching. Direct guidance of students’ thinking is consistent with the second author’s approach.