

# TrekNorth Multiple-Choice Test Question Writing Guide

## General M-C Item Standards:

1. The problem presented in the question is clearly defined.
2. Question information and wording is accurate and current according to subject area standards, current texts, dependable internet resources, and professional publications.
3. Distractors (wrong choice options) should be plausible, use real terminology, and be without cues (ie, *never, always,...*).
4. Include negative prompts (*which of the following is NOT...*).
5. Question/test fits the TrekNorth taxonomy targets.
6. It's ok if a question, or answer choice, "cues" the correct answer to another question but should not be sequenced together.

## Rubric For Scoring M-C Assessments:

**M-C Assessment Rubric:** M-C Exams at TrekNorth should be designed to meet two essential criteria. First, students should be fairly assessed as to their content knowledge. Second, students test-taking skills should be deliberately developed to prepare them for AP Level M-C examinations.

**Question Quality:** (problem clearly defined, information and wording current & accurate, distractors plausible without cues, includes negative prompts)

1	3	5
Less than 80% of questions meet quality criteria (it is possible to score "0" in this category).	80-95% of questions meet quality criteria	More than 95% of questions meet quality criteria.

**Teacher Score:** \_\_\_\_\_

**Exam composition meets taxonomy target:** Grades 7-8: 70-80% lower order, 20-30% higher Order  
**Grades 9-12 Pre-AP: 60-70% low order, 30-40% high order**  
 Skills Courses: 80-90% low order, 10-20% high order.  
 AP Courses: 25-40% low order, 60-75% high. Match style, phrasing, and thinking level of the subject area AP Exam.

1	3	5
Taxonomy targets are ignored (it is possible to score "0" in this category).	Attempt at meeting taxonomy target is evident but question-writing ability needs to be further developed.	Question content meets taxonomy targets for class level.

**Teacher Score:** \_\_\_\_\_

## TrekNorth Multiple-Choice Question Taxonomy Standards

Frequently multiple choice questions focus on lower level thinking skills such as recognition and recall. AP exams generally avoid this type of questioning and therefore, we should help develop student thinking skills in the an exam-taking context as they progress through the TrekNorth curriculum. To do so, we should make use of Bloom’s Taxonomy to develop testing questions that compel students toward “higher order” thinking.

### Applying Bloom’s Taxonomy

Bloom’s Taxonomy was modified recently (2000). When writing test questions for review, indicate in left margin what level the question is as indicated in taxonomy. The modified taxonomy is:

<u>Remember</u> (LR)	<u>Understand</u> (LU)	<u>Apply</u> (HAP)	<u>Analyze</u> (HAN)	<u>Evaluate</u> (HE)	<u>Create</u> (HC)
----- <i>Lower Order</i> -----			----- <i>Higher Order</i> -----		
<i>The majority of questions reflect recall, and recognition and basic understanding.</i>			<i>Higher-order questions require students to reflect more deeply, apply, analyze, and evaluate information in new ways.</i>		

#### Lower

**Remembering:** can the student recall or remember the information?

Skills include: define, duplicate, list, memorize, recall, repeat, reproduce state

**Understanding:** can the student explain ideas or concepts?

Skills include: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase

**Applying:** can the student use the information in a new way? Lower level includes direct reference of/to definition.

Skills include: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.

#### Higher

**Applying:** can the student use the information in a new way? Higher level does not directly reference definition/concept.

Skills include: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.

**Analyzing:** can the student distinguish between the different parts?

Skills include: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.

**Evaluating:** can the student justify a stand or decision?

Skills include: appraise, argue, defend, judge, select, support, value, evaluate

**Creating:** can the student create new product or point of view?

Skills include: assemble, construct, create, design, develop, formulate, synthesize, write.

### Taxonomy Target Guidelines:

Grades 7-8: 70-80% lower order, 20-30% higher Order

Grades 9-10 Pre-AP: 60-70% lower order, 30-40% higher order

Grades 11-12 Pre-AP: 50-60% lower order 40-50% higher order

Skills Courses: 80-90% lower order, 10-20% higher order.

AP Courses: 25-40% lower order, 60-75% higher. Exam questions should match the style, phrasing, and thinking level of the subject area AP Exam.

## Lower-Order Questions

Lower-order questions require students to use superficial thinking skills. The main concept/principle is presented as the central problem of the question. The correct answer choice is a clear definition or characteristic of the concept/principle.

**Remembering:** can the student recall or remember the information?

Skills include: define, duplicate, list, memorize, recall, repeat, reproduce state

**Understanding:** can the student explain ideas or concepts?

Skills include: classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase

(LR) According to Martin Seligman, disputation is:

- A. Believing that the most likely negative result will occur despite your effort.
- B. Monitoring, and then arguing against the catastrophic things you say to yourself.**
- C. Deliberate avoidance of an adverse event by doing something else to take your mind off of it.
- D. Putting time and space between you and an adverse event by ignoring it.
- E. The positive or negative mental habit of how we explain adversity to ourselves.

(LR) According to Martin Seligman, the act of "monitoring, and then arguing against the catastrophic things you say to yourself" is called\_\_\_\_\_.

- A. Pessimism
- B. Optimism
- C. Monitoring
- D. Disputing**
- E. Explanatory style.

A more challenging lower level question:

(LU) When Joe did poorly on a test he initially felt bad and feared he would fail the class but later argued against these catastrophic thoughts by telling himself that it's only one test, and he can do better in the future.

Monitoring and arguing against negative thoughts is:

- A. Pessimism
- B. Disputing**
- C. Monitoring
- D. Optimism
- E. Explanatory style.

## Higher-Order Questions

Higher order questions require students to arrive at answers by taking an extra cognitive step that may or may not have been previously learned. Application and analysis questions require transfer of knowledge to a new situation, manipulate concepts in new ways, or combine content of two areas in response to a problem posed by question.

## Application Questions

**Applying:** can the student use the information in a new way?

Skills include: choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.

(HAP-interpret) Which of the following would be an expected problem for a student with a pessimistic attributional style?

- A. A very low incidence of depression
- B. An internal locus of control causes him to ignore external forces
- C. Inability to dispute internal, global, stable attributions in response to adversity**
- D. Persistent external, specific, unstable attributions in response to adversity
- E. High self-esteem created by a series of life successes.

(HAP-interpret, operate) A hard working and conscientious first year college student finds that all her grades are lower than they were in high school. She has a B- average at the middle of the first semester. She explains this to herself by thinking: "It's too hard for me. I don't think I can make it in college. I should give up on becoming a teacher. I should transfer to an easier school or just get a job. College is not for me." Which of the following could benefit her the most?

- A. Practice in developing effective disputation skills in response to adversity and negative attributions.**
- B. Understanding that negative events usually effect all areas of a person's life.
- C. Learning to monitor her beliefs so that she becomes more dependent on external forces.
- D. Developing an equal balance between optimistic and pessimistic thinking.
- E. Practicing an external locus of control.

## Analysis Questions

Involve combining content from two or more areas and require that students consider concepts/principles in a new way. They pose a problem that needs to be solved.

**Analyzing:** can the student distinguish between the different parts?

Skills include: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.

(HAN-differentiate, contrast) Gina is a great student but her math assignments are always handed in late because she checks and re-checks every problem. She believes that every assignment must be perfect because it will make or break her class grade. Even though she has the highest average in the class, she becomes extremely upset whenever she makes an error. In teaching her effective disputation skills, which of the following dimensions of attribution would be most important?

- A. Internal-External
- B. Stable-Unstable
- C. Optimism-pessimism
- D. Rational-irrational
- E. Global-specific**

(HAN-experiment, HC-construct) A student does poorly on a test in a difficult subject area. When she receives her score her first thought is that she didn't study as well as she could have, that she spent too much time gossiping with friends during study groups, and didn't focus while working on the required assignments. She believes that she will do better on the next test because she is able to make the necessary adjustments in preparation and studying. This student is demonstrating effective disputation and:

- A. an external locus of control and high self efficacy.
- B. the power of positive thinking.
- C. low self efficacy and internal locus of control.
- D. an internal locus of control and high self efficacy.**
- E. unconditional positive regard.

**Evaluation Question:**

**Evaluating:** can the student justify a stand or decision?  
Skills include: appraise, argue, defend, judge, select, support, value, evaluate

(HE-appraise, evaluate) Which of the following statements is most contradictory to Martin Seligman's contention that an epidemic of flawed thinking is the primary contributor to current rates of depression in the United States:

- A. In the last 30 years the average age of the onset of depression has gone from age 30 to 15.
- B. Studies show that learned helplessness has become far more common among adolescents than it was 50 years ago.
- C. Research shows that promoting adolescent self-esteem is required before a student can demonstrate consistent success.**
- D. Research shows that attributional style is a habit that can be changed.
- E. Depression is more likely today than it was 50 years ago.

**Creation Question**

**Creating:** can the student create new product or point of view?  
Skills include: assemble, construct, create, design, develop, formulate, synthesize, write.

(HC- develop, construct) Which of the following is the best synthesis of the research of Aaron Beck, Albert Ellis, and Martin Seligman?

- A. Irrational thinking contributes to depression and lack of optimal performance.**
- B. Irrational thinking is almost impossible to cure.
- C. Irrational thinking is concentrated in a very small segment of society.
- D. Irrational thinking is an inherited personality characteristic.
- E. Irrational thinking is a classically conditioned behavior.