International Journal of Social Science and Business, Vol. 4 No 2; June 2019
ISSN: 2519-9161(Online), ISSN: 2519-9153(Print)
Published by Center for Academic Research (CAR)

The Truth behind Interpretative Exercises: Use More, Not Less

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Abstract

The article defines interpretative exercises, its advantages, disadvantages, design, test item construction, and value. Interpretive skills are important in everyday life. The key for teachers' using an interpretive exercise is Flexibility (16). A teacher has many objectives in a unit. Interpretive exercises are best used for higher level thinking.

Key Words: Interpretative exercises, introductory material, rules for construction of interpretative exercises, definition of interpretative exercises

Definition

Interpretive exercise questions are used to identify relationships in data, recognize valid conclusions, to appraise assumptions and inferences, and to detect proper applications of data. Ensures that all students will be confronted with the same task (10).

An interpretive question exercise consists of a series of objective items based on a common set of data which we'll call a display [Common Background Information] (4, 14, 18). The data may in the form of written materials, tables, charts, graphs, maps, cartoon, prose, poetry or pictures (1, 3, 5, 8). Identify relationships in data, recognize valid conclusions, to appraise assumptions and inferences, and to detect proper applications of data. Ensures that all students will be confronted with the same task (10).

A series of related test items may also take various forms but are most commonly selection type questions such as multiple choice, T/F, matching, key-type, or even restricted response (short answer essay). Because all students are presented with a common set of data, it is possible to measure a variety of complex learning outcomes. The students can be asked to identify relationships in data, to recognize valid conclusions, to appraise assumptions and inferences, to detect proper applications of data, and the like (3, 17).

These questions are the hardest to write, because you have to find novel introductory material related to your unit of instruction that works and is important. The reason for including this type of question in a unit test is that it gives students practice answering this type of question which is often used on standardized tests in science (5).

Introduction

Interpretive skills are important in everyday life. The key for teachers' using an interpretive exercise is Flexibility (16). A teacher has many objectives in a unit. Interpretive exercises are best used for higher level thinking. What learning outcomes can the interpretive exercise measure:

Application of principles and methods

Compare and contrast methods, selections, authors, etc.

Designing experimental procedures

Draw warranted conclusions

Evaluating arguments (reasoned judgment and defend it)

Formulating conclusions/hypotheses

Generating hypotheses

Integrate knowledge from related areas. Interpreting charts, tables, figures, cartoons

Interpretation of relationships

Measure the ability to use pictorial materials

Recognizing assumptions

Recognizing inferences

Recognize the relevance of information

Integrate knowledge from related areas (1, 3, 6, 10, 14, 16, 20).

Specifically, interpretative exercises measure the ability to interpret media found in common everyday usage and gives the student a real to life experience. Complex learning outcomes can be measured with a single objective item. They have more structure than performance/essay/short answer assessments due to having a series of related multiple test items based on a common set of data, greater depth and breadth can be obtained allowing for the depth measurement while minimizing the influence of irrelevant factual information (14).

An interpretive question calls for a careful assessment of what the author means in a work. To decide whether a question is interpretive, students should try to write two different answers to it, supporting each answer with evidence from the selection (7). The question should express genuine doubt and curiosity. Students may have several answers in mind which seem equally compelling or students may believe that satisfying answers will be found through discussion, though the student may have been unable to discover it on their own (11).

These questions are the hardest to write, because you have to find novel introductory material related to your unit of instruction that works and is important. The reason for including this type of question in a unit test is that it gives students practice answering this type of question which is often used on standardized tests in science (12, 15). However, they are easy to simplify by preparing key categories that can be reused with different content (11). A CAUTION is paramount here. Interpretive exercises must be constructed carefully. Two examples of poor construction are the answer is directly stated in the introductory material, and if the question can be answered based on general knowledge, then the interpretive exercises is NOT constructed carefully (6, 11, 18).

Advantages

Removes the influence of irrelevant factual information (e.g., knowledge of football in calculating math problems) – the intro materials provide the knowledge necessary for everyone to answer the question(s) measuring complex learning outcomes (3, 6).

The main advantage of the interpretive exercise over the performance-based assessment task, in measuring Can measure specific mental processes derived from its standard structure for all students and are scored objectively [unlike performance tasks, which are less structured], the results tend to be more reliable due to greater structure than supply item types [i.e. essay]. (3, 7-9, 12, 13, 15, 19).

The relatively easy-to-use authentic introductory material makes it possible to measure using that students will encounter in everyday living the ability to interpret written materials, charts, graphs, maps, pictures, newspaper articles, and other communication media encountered by everyday situations. Minimizes the influence of a students' lack of needed factual information on measurement of complex learning outcomes because necessary background information is provided, it is possible to separate the assessment of the reasoning skills from content knowledge of the subject (6, 9, 12, 15, 19).

Measure more complex learning outcomes than is possible with other forms of selected response/objective type test items through the analysis of data than can single, isolated items (6, 12, 15, 19).

Because there is one set of common introductory materials, having a series of related test items based on a common set of data, greater depth and breadth can be obtained in the measurement of intellectual skills [i.e. reasoning skills] (1, 2, 4, 8, 9, 14 19). Makes it possible for students to respond to a larger # of items in a given period of time (11).

Easy to simplify by preparing key categories that can be reused with different content (11).

Removes the influence of irrelevant factual information (e.g., knowledge of football in calculating math problems) – the introductory materials provide the knowledge necessary for everyone to answer the question(s). More structured than performance-based assessment (20).

Limitations of Interpretive Exercise

These items are difficult to construct. Interpretative exercises require more time and greater skill to construct interpretive items than any other objective type items due to heavy demand on reading skills and finding pertinent introductory material (10, 11, 20).

Interpretative exercises assume the child has adequate reading/comprehension level to the material given. The poor reader is handicapped by both the difficulty of the reading material and the length of time it takes to read each test question. Keep reading level low, passage brief. In primary grades use more pictorial materials (2-4, 6, 8, 14, 19).

One of the major limitations is interpretive exercise is difficultly of construction. It requires more time and greater skill to construct interpretive items than any other objective type items. Selecting appropriate introductory material (the common data) that are new (novel) to the students but that are relevant to the instructional outcomes requires considerable searching. When pertinent material is found, it usually must be edited and reworked to fit the specific behaviors/objectives to be measured. This makes interpretative exercises time-consuming & difficult to write (1-4, 6-8, 11-15, 18, 19).

Interpretive exercises do not measure the overall (holistic) approach to problem solving just the different aspects of the process. They cannot measure overall problem solving skill due to being limited in measuring complex achievement such as integration and problem solving skills (doesn't show work steps). This limitation is based on the student being unable to assess how the student organized their reasoning or whether they would be able to reason well if not given the cues and answers are given, only test problem-solving ability at the recognition level not production skills because correct answer is present (1,7, 8, 12, 13, 15, 18, 19).

One article stated that interpretative exercises do not measure "real" problem solving – where you actually have to re-state the question. Therefore, use of objective items may restrict assessment of learning to recognition level concluding for these reasons and more, this type of assessment is not much used (1).

Design

Introduction

Interpretative exercises intent to focus on reasoning skills by providing all the knowledge or information that is needed to answer the question but require students to reason about that information to answer the questions (13).

They are two main tasks in constructing interpretive exercises; (a) selecting appropriate introductory material and (b) constructing a series of dependent test items (10).

Components of an interpretative question are information/data (Maps, Paragraphs, Charts, Figures, Story, Table of data, Pictures,) Questions, require interpretation, analysis, or application of the material (19).

Principles for Constructing Interpretive Items

The following principles help in constructing effective interpretive items:

1. The introductory material should be relevant to the context objectives.
2. Effectiveness of this item depends upon the introductory material. It should not be too simple or too complex.
3. The introductory material should be according to the curricular experience and reading ability of the students.
4. The introductory material should be novel one. It should not be identical to those used during instruction.
5. The introductory material should be short and meaningful (6).

Guidelines for Writing Interpretive Exercises

Introduction

Interpretative exercises intent to focus on reasoning skills by providing all the knowledge or information that is needed to answer the question but require students to reason about that information to answer the questions (13).

Select introductory material that is relevant to learning objectives and correct complexity and measures the achievement of specific instructional outcomes (3, 8, 10, 16).

Exercise contains all information needed to answer questions and challenges students at various levels of understanding (13). Identify the reasoning skills that match test items with instructional goals and objectives you are assessing before creating the exercise (2, 4, 8, 13, 14, 18, 19).

Introductory Material

Keep introductory material brief and readable and appropriate for students' knowledge (1, 8, 10). Use introductory material that is brief, but meaningful (3, 7-10, 13, 15, 16). Revise introductory material for clarity, conciseness, more precise purpose, and greater interpretive value (8, 10 15, 16). The question should also be clear, easy for another person to grasp immediately. Use simple and direct language. If the question is hard to understand, the student should rephrase it or retrace the thinking that led to the question (11).

Heavy demand on reading skill (10, 20). Reduces the reading required (11). If there are various ways to present material (all of which will serve equally well & all of which students are equally familiar with), material that places the least emphasis on reading skills is preferred (16). Simple reading level [not complex words or sentence structure] (8, 10). Brief but meaningful [abbreviate without removing essential content] (8, 10). Interpretive exercise should include only test items that require students to read introductory material (11).

During discussion, three kinds of questions can be raised about a reading selection: questions of fact, questions of interpretation, and questions of evaluation (11).

QUESTIONS OF FACT ask students to recall a factual detail in the selection by citing or paraphrasing the author's words. A disagreement over facts can be resolved quickly if participants simply turn to the passage in question and reread it. A question of fact has only one correct answer (11).

QUESTIONS OF INTERPRETATION ask students to make inferences about the meaning of a selection. More than one valid answer to an interpretive question is necessary. Answers to interpretive questions must be supported by evidence in the selection (11). If questions require analysis and interpretation of introductory material don't ask for answers that are directly answered in the introduction or questions that don't require the introductory material (8).

QUESTIONS OF EVALUATION ask students to compare the authors' ideas and written words with their own. Answers to evaluative questions are as individual and as varied as the students themselves. Interpretation is the main purpose of a Great Books discussion, so most questions raised including the opening question-will be interpretive. Factual questions can be used to bring to light evidence in support of interpretations and can clear up misunderstandings. Questions of evaluation can introduce a personal dimension to discussion once interpretive issues have been resolved (11).

Most selections to be used as introductory material for test questions will need to be shortened/ /revised in order to be used effectively. Revisions may require to you to revise the questions (this may require you to revise the intro material again!) The question should be specific to the work and minimizes the influence of irrelevant material (3, 7, 9, 20).

If the question can be asked, with only minor changes, about several selections, then it is too general. For example, the question, "Why does Antigone have a sad ending?" is not sufficiently specific. But "Is Antigone doomed because she is the daughter of Oedipus, or does she determine her own fate?" is more specific. It is therefore easier to address (8, 10, 11, 16).

A good interpretive question is one that the student really cares about-one that has arisen from their own response to the work and curiosity about it. Genuine interest is contagious. A student's honest doubt encourages others to take the question seriously (11).

Identify the reasoning skills you are assessing before creating the exercise. Be succinct (clarity and concise) when providing information use novel, but similar information. Example: shown can be used with: a brief description of a situation, a conclusion based on the situation, a list of assumptions (9, 11, 13, 19, 20).

Be succinct when selecting introductory material that is new [novel] (e.g., in textbooks not adopted by the school/district) but similar to students. In order to measure complex learning outcomes, materials identical to those used in instruction can NOT be used this would only measure rote memory (1, 3, 7-10, 13, 15, 16, 19, 20). Present any new material in ways that are familiar to students. It's an unfamiliar way that can overwhelm students & prevent them from demonstrating their achievement of complex learning outcomes. Use materials that are similar to those used in class but that vary in content or form. Avoid too much novelty – material should be similar but not the SAME (16).

Select introductory material that is appropriate and relevant to the student's curricular experience and reading level (2, 3, 7, 8, 10, 15, 16, 20). Introductory material for questions must be pertinent to the course content and complex enough to evoke the mental reactions specified in the course objectives (16). Exercise contains all information needed to answer questions. Can challenge students at various levels of understanding: application, analysis, synthesis, evaluation (13, 19).

Introductory material usually begins with verbal, tabular or graphic information which is the basis for one or more questions (13, 19). This material consists of displays that may include: Prose paragraphs Numerical data Charts, graphs, diagrams, or maps Pictures, drawings, or photographs Cartoons or caricatures Lists of words or symbols Mathematical formulas Musical scores or excerpts Audio or video recordings Poems, short stories, or essays Articles from newspapers, magazines, or journals Quotations, adages, or scriptures Specimens [rocks, plants, animals, chemicals, art, etc.] (2, 4, 13, 14,16, 20).

Pictorial materials can serve two useful purposes in interpretive exercises. They can help measure a variety of learning outcomes similar to those already discussed simply by replacing the written or tabular data with a pictorial presentation. This use is especially desirable with younger students and when ideas can be more clearly conveyed in pictorial form. Secondly, pictorial materials can also measure the ability to interpret graphs, cartoons, maps, and other pictorial materials. In many school subjects, these are important learning outcomes in their own right (2, 4, 13, 14, 19).

The following example(s)illustrates the use of pictorial materials: Preferred materials to introduce questions for different age groups:

Elementary Students – pictorial materials

Middle/High School Students & Adult Learners – pictorial materials and verbal materials with low vocabulary load and simple sentences (16).

When using interpretative questions for math give students the formulas, test ability to apply concepts, rather than ability to memorize formulas (16).

Be sure the material is complete enough to be meaningful/interesting to students and be careful not to omit elements that are crucial to the interpretive skills being measured (13, 16).

If student answers incorrectly it is because they have not mastered the thinking or reasoning required by the question NOT because they failed to memorize background information. Math questions give students the formulas, test ability to apply concepts, rather than ability to memorize formulas (13, 19).

Test Item Construction

Introduction

First and foremost, in constructing the test items use the guidelines given in the writing of selective response items (3, 10, 11, 15, 20).

Interpretive exercise questions consist of a series of selective response items based on a common set of introductory material. The introductory material may be in the form of written materials, tables, charts, graphs, maps or pictures (12).

The introductory material makes it possible to measure more complex learning outcomes then can be measured with a single objective test item type (9, 16).

Make the number of test items roughly proportional to the length of the introductory material. (20).
Construct a series of dependent test items based on a common set of data where greater depth and breadth will provide desired behavior for each exercise. The several questions about the same information will require more types and greater depth of reasoning skills to answer. Make sure answers to the questions cannot be found in the introductory information (3, 9, 19).

Construct several test items for each exercise (9). Make the number of test items roughly proportional to the length of the introductory material (3, 6-8, 10, 13, 15). In constructing key-type test items, where applicable make the categories homogeneous and mutually exclusive (3, 6, 7, 8, 10, 11).

Construct test items that require assessment of deep understanding and reasoning [analysis and interpretation] of the introductory material outcome [make sure you do not ask questions that are directly answered by the introductory material] (1, 3, 6, 7, 9, 10, 11, 15, 16, 19).

The questions or problems which accompany the display may be presented in one or more of the following formats: Short answer or completion items; Alternative response questions; Matching exercises; Multiple-choice questions; Essay questions (2, 4, 11, 20)

Constructed in same way a modified multiple-choice form uses a common set of alternatives but answers should have similar types of judgment (11).

Best type of short-answer or selected-response to assess reasoning. Intent is to focus on reasoning skills by providing all the knowledge or information that is needed to answer the question (11, 19).

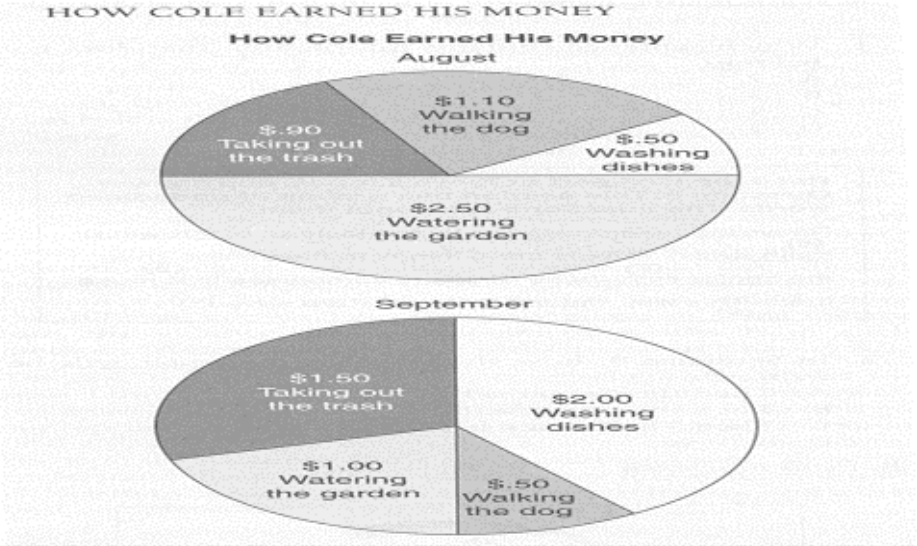
In constructing key-type test items, develop standard key categories where applicable using categories that are homogeneous and mutually exclusive (3, 10, 11, 20).

As is in any test there should only have one correct answer (11).

Writers of interpretative exercises need to keep everything on the same level for students. Do not start out with less information and then add larger questions … stay consistent (11).

Examples of Types of Interpretative Exercises

The interpretive exercises can be used for any subject (Figures 1- 11) when they are supplemented by multiple choice, completion, etc. test item rules when these type test items are used in conjunction with an interpretive exercise.



1. Which statement is true based on these graphs?
A. Cole earned less money watering the garden in September than in August.
B. Cole earned more money walking the dog in September than in August.
C. Cole washed dishes less often in September than in August.
D. Cole does not take out the trash on school days.

Can you make additional questions?

Figure 1: Graph interpretation

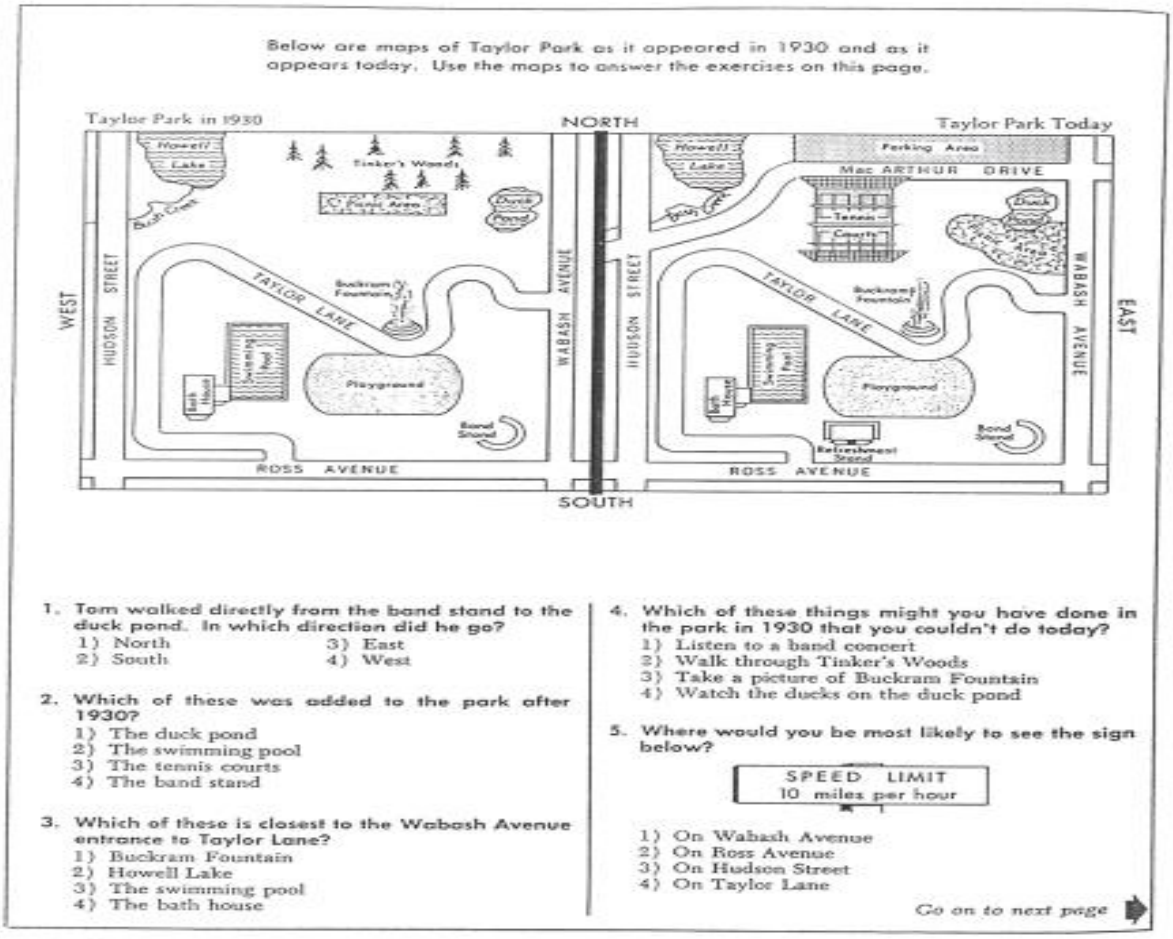
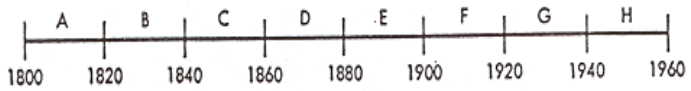


FIG. 6.19. Illustration of page arrangement with reference material. (Reproduced by permission of Houghton Mifflin Company from E. F. Lindquist & A. N. Hieronymus, *Iowa Tests of Basic Skills*, Form 4, Multi-Level Edition for Grades 3–9 [Houghton Mifflin, 1964], p. 51.)

Figure 2: Map reading

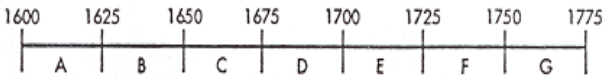
Answer five questions from this part.

1. On the timeline the letters *A–H* represent time intervals as indicated. For *each* event listed below, write the *letter* that indicates the time interval in which that event occurred.



(1) The United States joined NATO.
(2) The United States issued the Monroe Doctrine.
(3) Thomas Jefferson was elected President.
(4) The War Between the States broke out.
(5) The United States acquired Puerto Rico.
(6) The Sherman Antitrust Act was passed.
(7) The first Social Security Act was passed.
(8) The Erie Canal was completed.
(9) The Mexican War was fought.
(10) Henry Ford began to mass-produce automobiles.

TIMELINE TEST



1. New Netherland surrendered to the English.
2. The settlements of Connecticut formed a single colony.
3. The first settlement was planted in Maryland.
4. The Puritans started a "Great Migration" to New England.
5. The Mason-Dixon Line was drawn to settle the boundary dispute between Maryland and Pennsylvania.
6. The first settlements were established in the Carolinas.

Figure 3: Timeline

Items 117 through 125 refer to the following experiment. In studying the effect of various salts upon the relative humidity above water solutions of the salts, the following results were obtained.

Percent Relative Humidity above Salt Solutions

Salt Added per 100 g H_2O	Unsaturated Solutions at 68° F.						Saturated Solution at 68° F.	
Formula	Wt. Salt	% Hum.	Wt. Salt	% Hum.	Wt. Salt	% Hum.	Wt. Salt	% Hum.
$CaCl_2$	20 g	80%	40 g	61%	60 g	44%	75 g	32%
$MgCl_2$	29 g	72%	40 g	48%	—	—	55 g	32%
NaCl	20 g	89%	—	—	—	—	36 g	78%
$Ca(NO_3)_2$	20 g	98%	40 g	95%	60 g	90%	129 g	59%
$NaNO_3$	20 g	96%	40 g	93%	60 g	86%	88 g	76%
NH_4NO_3	20 g	94%	40 g	88%	60 g	83%	192 g	68%

Using only these data, mark the degree of correctness of items 117 through 125 as follows:

1 The statement is true.
2 The statement is probably true; additional data would be necessary for a final decision.
3 The statement is impossible to judge; the experiment provides no evidence upon which to make a prediction of the results to be expected in this case.
4 The statement is probably false; additional data would be necessary for a final decision.
5 The statement is false.

117. The relative humidity above a saturated solution of KCl is lower than the relative humidity above a saturated solution of NaCl
118. At 68° F. at a concentration of 40 g salt per 100 g of H_2O, NH_4NO_3 produces a lower percent humidity than $Ca(NO_3)_2$ does.
119. These data were collected to explain why saturated solutions absorb moisture from the air.
120. At 68° F. increasing the concentration of the above solutions of these salts always tends to decrease the relative humidity above the solutions.
121. At 68° F. the relative humidity above a solution containing 30 g $NaNO_3$ per 100 g H_2O is about 94.5%.
122. At 68° F. the relative humidity above a solution containing 17 g NH_4NO_3 per 100 g H_2O is 99%.
123. The relative humidity above a solution containing 80 g $CaCl_2$ per 100g H_2O is 30%.
124. On a weight basis, the listed chlorides are more effective than the listed nitrates in reducing the relative humidity at 68° F.
125. The relative humidity above a salt solution at 68° F. is less than that above pure water at the same temperature because the ions from the dissolved salts take up some of the surface area of the solution.

Figure 4: Chart interpretation

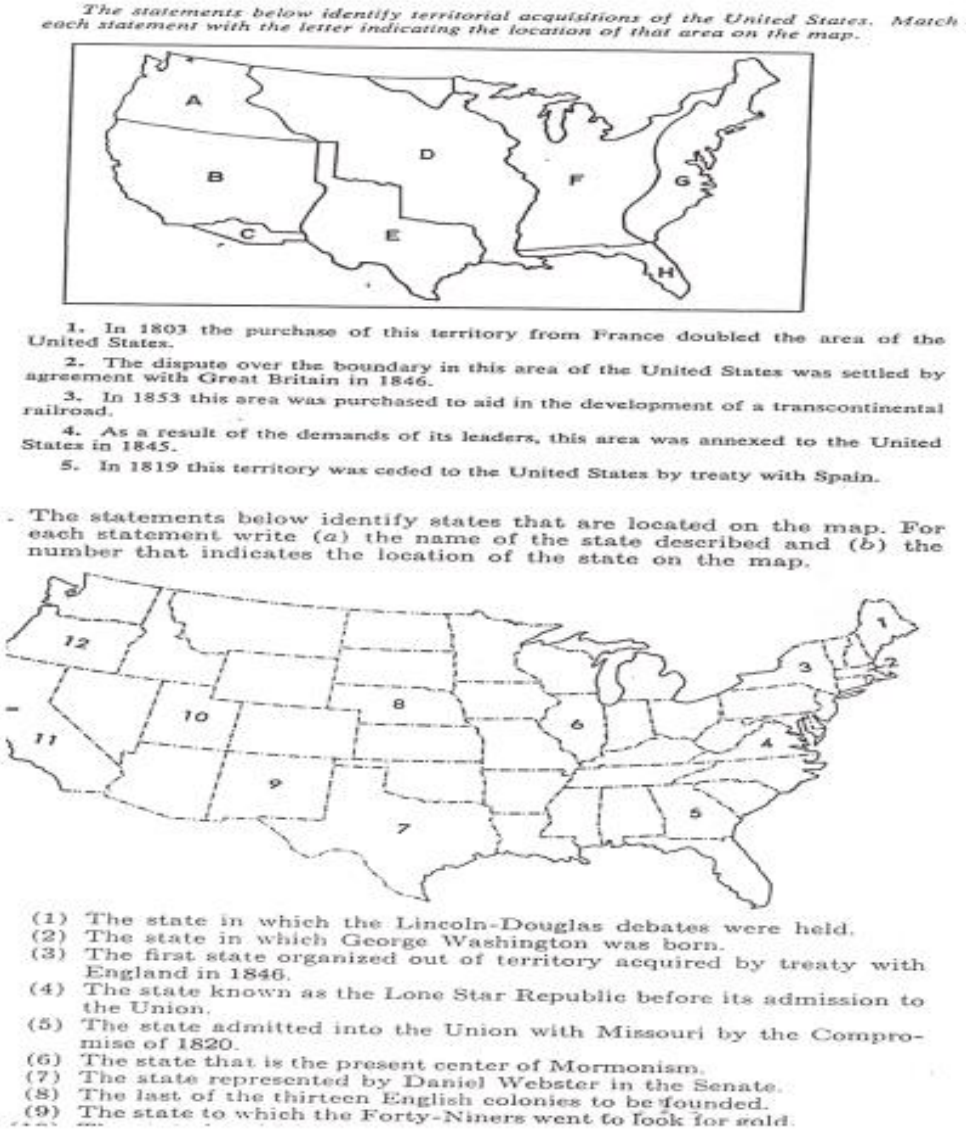
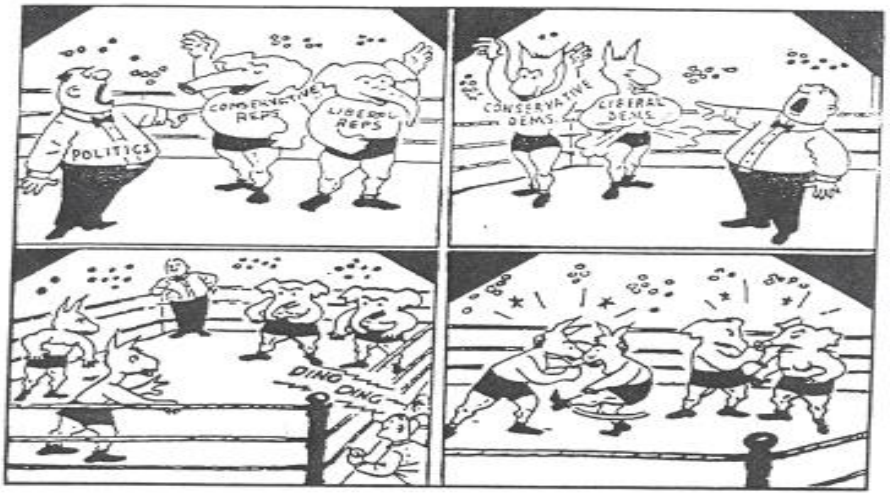


Figure 5: Map identification



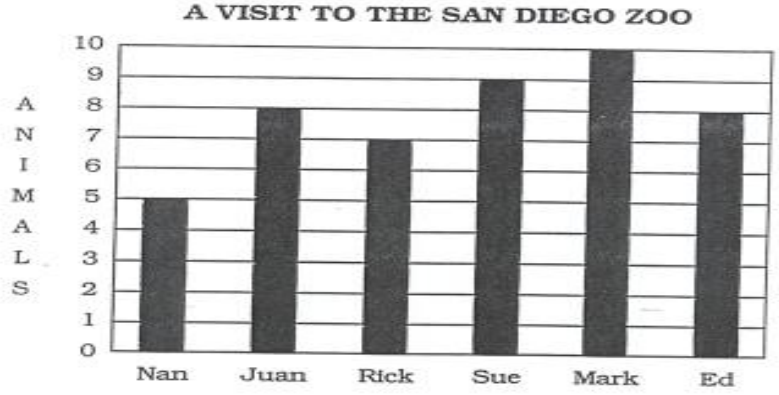
1. The cartoon illustrates which of the following characteristics of the party system in the United States?
   - (A) Strong party discipline is often lacking.
   - B The parties are responsive to the will of the voters.
   - C The parties are often more concerned with politics than with the national welfare.
   - D Bipartisanship often exists in name only.
2. The situation shown in the cartoon is *least* likely to occur at which of the following times?
   - A During the first session of a new Congress
   - B During a political party convention
   - C During a primary election campaign
   - (D) During a presidential election campaign

Figure 6: Political cartoon interpretation

READING A GRAPH

ACTIVITY: Before school ended, Ms. Greer's fourth grade class spent a day at the zoo. Everyone had a great time being together, enjoying a delicious picnic, and seeing all of the animals. At the zoo, Ms. Greer's class saw zebras, elephants, kangaroos, monkeys, tigers, lions, horses, deer, bears, peacocks, and ostriches.

Study the graph carefully. Then answer the questions below.



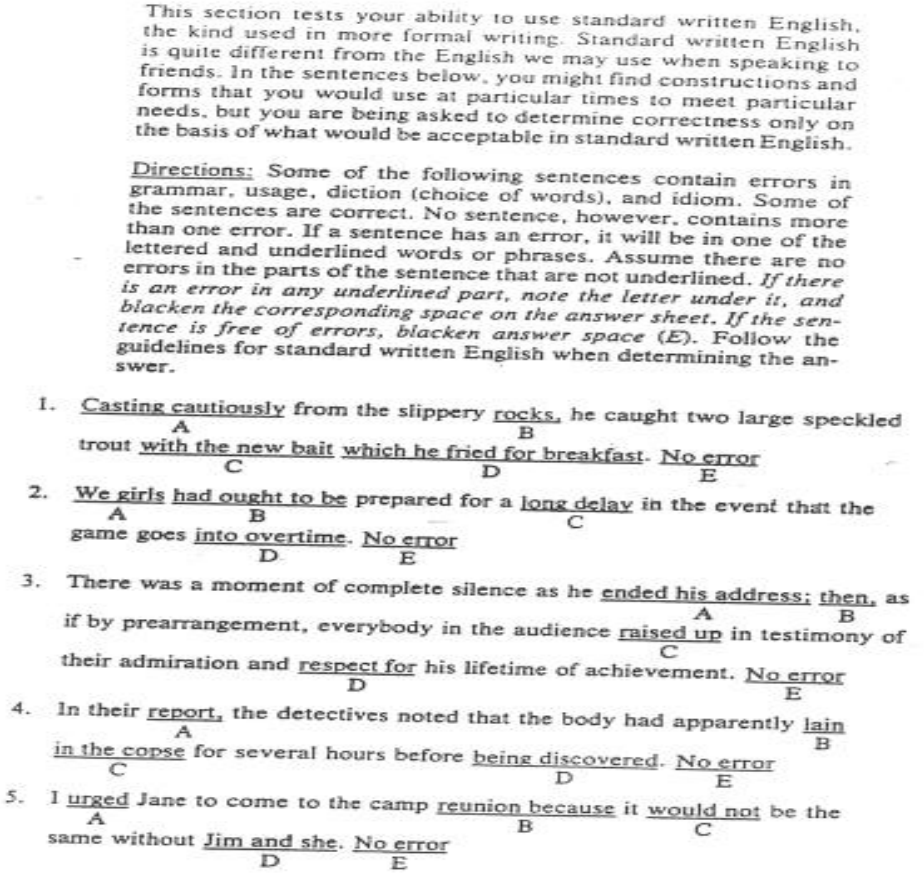
31. Who saw the most animals at the zoo?
(a) Juan (b) Sue (c) Mark (d) Rick

32. Which student saw the least number of animals?
(a) Ed (b) Nan (c) Rick (d) Sue

33. How many students saw more than five animals?
(a) 5 (b) 4 (c) 6 (d) 3

34. How many animals did Juan, Sue, and Mark see together?
(a) 22 (b) 29 (c) 24 (d) 27

Figure 7: Graph reading



This section tests your ability to use standard written English, the kind used in more formal writing. Standard written English is quite different from the English we may use when speaking to friends. In the sentences below, you might find constructions and forms that you would use at particular times to meet particular needs, but you are being asked to determine correctness only on the basis of what would be acceptable in standard written English.

Directions: Some of the following sentences contain errors in grammar, usage, diction (choice of words), and idiom. Some of the sentences are correct. No sentence, however, contains more than one error. If a sentence has an error, it will be in one of the lettered and underlined words or phrases. Assume there are no errors in the parts of the sentence that are not underlined. *If there is an error in any underlined part, note the letter under it, and blacken the corresponding space on the answer sheet. If the sentence is free of errors, blacken answer space (E).* Follow the guidelines for standard written English when determining the answer.

1. Casting cautiously (A) from the slippery rocks, (B) he caught two large speckled trout with the new bait (C) which he fried for breakfast. (D) No error (E)
2. We girls (A) had ought to be (B) prepared for a long delay (C) in the event that the game goes into overtime. (D) No error (E)
3. There was a moment of complete silence as he ended his address; (A) then, (B) as if by prearrangement, everybody in the audience raised up (C) in testimony of their admiration and respect for (D) his lifetime of achievement. No error (E)
4. In their report, (A) the detectives noted that the body had apparently lain (B) in the copse (C) for several hours before being discovered. (D) No error (E)
5. I urged (A) Jane to come to the camp reunion because (B) it would not (C) be the same without Jim and she. (D) No error (E)

Figure 8: English grammar, usage, diction exercise

Questions 40- 44. Read the chart titled Outer Space Weight. Write each correct answer in the blank. (13 points)

OUTER SPACE WEIGHT CHART

Earth	Moon	Venus	Mars	Jupiter
40 lb.	7	36	15	105
50 lb.	8	45	19	132
60 lb.	10	54	23	159
70 lb.	11	63	27	185
80 lb.	13	72	30	211
90 lb.	15	81	34	238
100 lb.	16	90	38	264

40. If you weigh 40 lb. on Earth, you would weigh 7 lb. on the moon. (1pt)

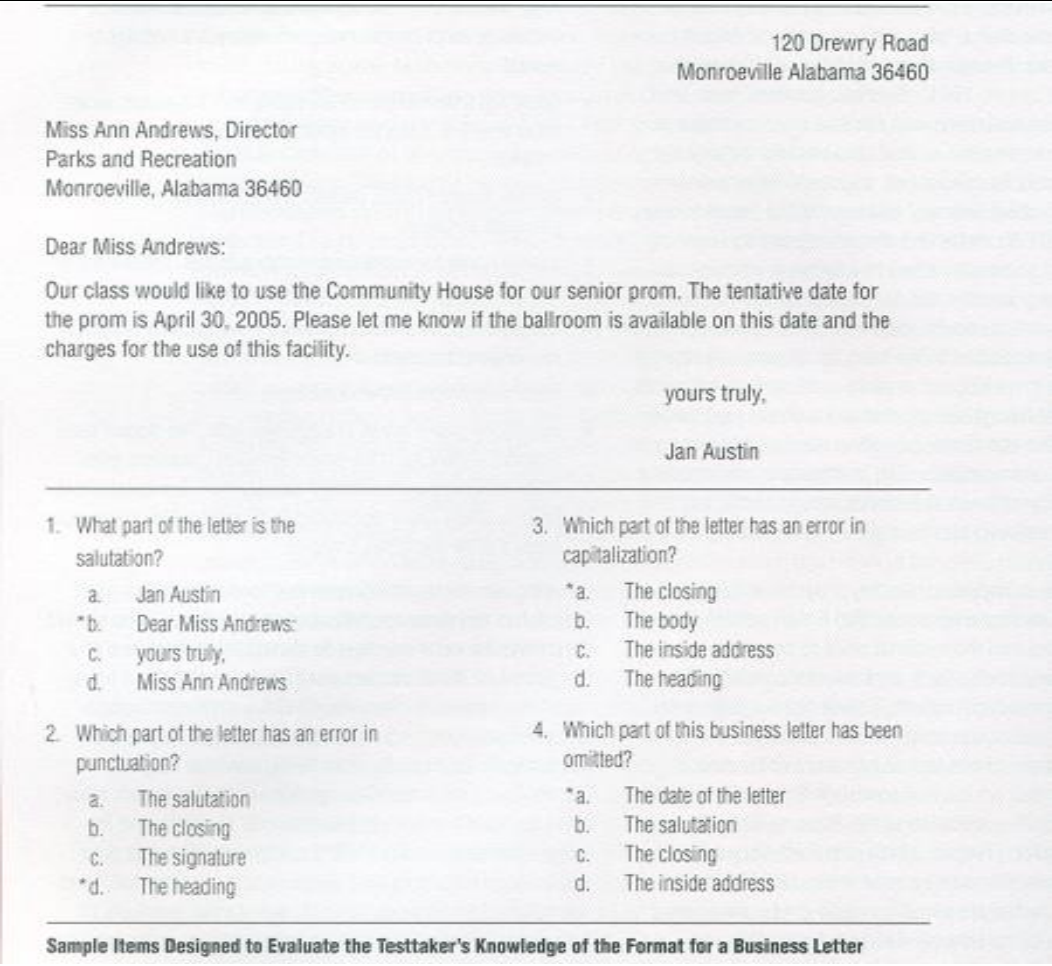
41. If a rock weighs 132 lb. on Jupiter, it weighs 50 lb. on the planet Earth. (1pt)

42. If a person weights 38 lb. on Mars, they would weigh 90 lb on Venus. (1pt)

43. If a man weighs 30 lb. on Mars, how much more would he weigh on Venus? 42 lb. (5pt)

44. If a person weighs 15 lb. on Mars, how much less would they weigh on the moon? 8 lb. (5pt)

Figure 9: Chart interpretation using fill in the blank



120 Drewry Road
Monroeville Alabama 36460

Miss Ann Andrews, Director
Parks and Recreation
Monroeville, Alabama 36460

Dear Miss Andrews:

Our class would like to use the Community House for our senior prom. The tentative date for the prom is April 30, 2005. Please let me know if the ballroom is available on this date and the charges for the use of this facility.

yours truly,

Jan Austin

1. What part of the letter is the salutation?
   a. Jan Austin
   *b. Dear Miss Andrews:
   c. yours truly,
   d. Miss Ann Andrews

2. Which part of the letter has an error in punctuation?
   a. The salutation
   b. The closing
   c. The signature
   *d. The heading

3. Which part of the letter has an error in capitalization?
   *a. The closing
   b. The body
   c. The inside address
   d. The heading

4. Which part of this business letter has been omitted?
   *a. The date of the letter
   b. The salutation
   c. The closing
   d. The inside address

Sample Items Designed to Evaluate the Testtaker's Knowledge of the Format for a Business Letter

Figure 10: Business letter format

Classroom Discussion

Classroom discussion is necessary, and in fact, mandatory if higher level thinking is to be formulated in learning objectives. The best preparation for discussion is writing questions because it forces the student to engage with the work and form some preliminary ideas about its meaning. When students as well as tutors bring their own written interpretive questions to the discussion, they are much better able to learn from and contribute to each other's ideas, and to develop a stimulating discussion (11).

Students should use their own uncertainty as the starting point for questions. Some questions will occur spontaneously as the student reads. Some questions will be only half-formed- a question mark or an exclamation point that students have scribbled in the margin. By the end of the second reading, students will have eliminated some of the questions as factual and will be ready to pursue the others further (11).

Students should trust their own sense of what is significant in a selection. The phrases, sentences, and passages that students have underlined are likely to lead to issues of interpretation that students will care about. In fiction, students should think about beginnings; moments of crisis or decisive change; endings; and passages in which the characters reflect on their situation. In nonfiction, students should focus on statements of the author's aims and the issues to be dealt with; on definitions of terms; on summaries; and on conclusions. Authors may repeat the ideas that are most important to them by drawing parallels; developing contrasts or variations on a theme; and making restatements or summaries (11).

In fiction, a conflict of motives in a character or an intricate chain of events in the plot often calls for interpretation. The author's attitude toward characters, if it is ambivalent or unclear, may also raise interpretive questions.

Finally, the narrator may be a source of questions if the narrative point of view is complex: Does the narrator speak for the author, or does he speak for himself? Are the narrator's statements accurate and reliable? In nonfiction, steps in the argument that students do not follow, examples that seem inappropriate, and passages in which the author presents an opposing view can bring the issue into focus so that the student can formulate questions. If points in an argument seem to contradict each other, students should try first to resolve the contradiction. If they cannot, express this put the element in a question (11).

Students' immediate, subjective response to a work can identify important interpretive issues. Students should trust their response if they feel intensely sympathetic toward a character, if they instinctively reject a character, or if they feel gratified or annoyed by an event in a story or a statement in an argument. The student's reaction suggests that the author has raised an issue that is important to the student. Students should step back and try to understand just what that issue is and how it is developed throughout the work. Students should appreciate and try to justify the opposing view. When students can see the other side of the issue clearly, they can pose an interpretive question. Challenge and argue with the author-but keep an open mind and continue to focus on the text (11).

Conclusion

As stated in the abstract and introduction interpretive skills are important in everyday life. The key for teachers' using an interpretive exercise is flexibility (16). A teacher has many objectives in a unit. Interpretive exercises are best used for higher level thinking. Many objectives can be tested at many levels with one question. In particular higher-level learning can be validly tested. As seen in the versatile examples of interpretative exercises they should be used more and not less.

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