ABSTRACT
                A study analyzed the validity of inferential,
cause/effect, and main idea questions which were asked in five
selected commercial informal reading inventories (IRIs). The
inventories were "Analytical Reading Inventory (3rd Edition)," "Basic
Reading Inventory (4th Edition)"; "Burns and Roe Informal Reading
Inventory (3rd Edition)"; "Classroom Reading Inventory (5th
Edition)"; and "New Sucher-Allred Reading Placement Inventory."
Passages and questions for grades 1 through 6 on Forms A and B from
each IRI were examined. Results indicated that: (1) many questions
labeled as main idea were actually asking for the topic of the
reading passage; (2) many IRIs contain narrative passages which
contain neither a stated nor an implied main idea; (3) inference
questions were often ambiguously worded, asked opinions from the
reader, or were not inferential in nature; (4) many inference
questions failed to ask students to explain the reasoning behind
their answers to the question, (5) only two of the IRIs included
cause/effect questions, but these questions were labeled correctly by
the authors of the tests more often than the other types of questions
studied; and (6) for some tests, the different forms were
inconsistent in the number of questions and the manner in which they
were asked. Findings suggest that a more open-ended questioning or
retelling format would allow a more accurate evaluation of
comprehension of a specific passage. (Two tables of data are
included.) (RS)

Informal Reading Inventories:
What are They Really Asking?

Diane D. Allen, Ed.D.
University of North Texas

Rebecca A. Swearingen, Ed.D.
Kansas State University

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Introduction

Commercial informal reading inventories are one of the most widely suggested assessment instruments for use in public school reading programs. They are designed to assist the classroom teacher and the reading specialist in making placement decisions and in determining the target areas for reading instruction. In making these decisions teachers assume two things. First, they assume that the questions on the IRI's are valid and that they are assessing the areas they claim to be assessing. In this study inferential and cause/effect questions were examined to determine if this were true. Inferential questions should require the reader to combine background knowledge with context clues in the text in order to arrive at a logical answer. Cause and effect questions should give one part of the relationship, i.e., cause or effect, and ask the reader to supply the missing part, which might be stated or implied. Secondly, educators also assume that tests are consistent in the type of task they require for each specific category of comprehension questions. In other words, an inference question on one passage should ask the reader to do the same task

as one on a second passage.

Past studies have investigated these assumptions about IRI questions. In an examination of the <u>Classroom Reading Inventory</u> Duffelmeyer (1980) found that only half of the inferential questions were passage dependent. That means that half of the questions could be answered without reading the passage; therefore, the reader could answer without making an inference as the term was previously defined. In 1981 Schell and Hanna looked at questions on five popular IRIs and concluded that the categories of questions were not objectively classified. Many times questions from these inventories were inappropriately categorized or placed in overlapping categories. Duffelmeyer and Duffelmeyer (1987; 1989) found disturbing problems with main idea questions in three IRIs. Rather than asking for the general point or main idea of a passage, some main idea questions only ask students for the topic of the passage (What is this story about? or What would be a good name for this story?). More serious is the problem that many of the passages did not contain a main idea at all but were simply a narrative with a series of story events.

This study attempts to update previous studies by analyzing more recent editions of the informals and by including an examination of cause/effect questions. The purpose, then, of this study was to analyze the validity of the questions which are asked in five selected informal reading inventories. Specifically, the questions analyzed were inferential, cause/effect, and main idea.

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The study was designed to answer the following questions: 1. Do inferential questions require the reader to use a combination of background knowledge and context clues? 2. Is there a consistency throughout the test in the type of reading task required for answering a cause/effect question?

Method

Five informal reading inventories were selected for this study: Analytical Reading Inventory, 3rd Edition (Woods & Moe, 1985); Basic Reading Inventory, 4th Edition (Johns, 1988); Burns and Roe Informal Reading Inventory, 3rd Edition (Burns & Roe, 1989); Classroom Reading Inventory, 5th Edition (Silvaroli, 1986); and The New Sucher-Allred Reading Placement Inventory (Sucher & Allred, 1981). Passages and questions for grades one through six on Forms A and B from each IRI were examined.

Inferential questions were studied to determine whether they were inferential in nature or asking for implicit knowledge. Cause/effect questions were initially analyzed to identify whether they were literal or inferential in nature. They were further analyzed in conjunction with the passages to determine if the type of cause/effect questions (literal or inferential) was consistent throughout the test or whether the type of cause/effect questions was related to text type.

Results

The Analytical Reading Inventory, 3rd Edition consists of three forms (A, B, and C) grade preprimer through nine. The types of questions asked are: main idea, factual, terminology, cause and effect, inferential, and conclusion. When the cause and effect questions were examined it was found that 84% of these questions did indeed follow the suggested question format. Two of the questions which are identified as cause/effect in fact ask for sequential information in which one event follows another one, but the first event does not actually cause the other. Examination of the inferential questions revealed that 100% of the questions asked were truly inferential in nature.

The Basic Reading Inventory includes three forms (A, B, and C) graded preprimer through eight. The types of questions asked are main idea, fact, inference, evaluation, and vocabulary. Seventy-one percent of the inferential questions were truly inferential in nature. Many of the questions which were identified as inferential were not passage dependent, therefore could be answered without having read the passage.

The Burns and Roe Informal Reading Inventory consists of four forms, graded preprimer through twelve. There are six question types: main idea, cause/effect, inferential, sequence, vocabulary, and detail. The cause/effect questions are identified as stated or implied. All of the cause/effect questions were correctly labeled. They were also correctly identified as either stated or implied.

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Eighty-nine percent of the inferential questions were correctly labeled. An example of an incorrectly identified question is found in the Form A, Level 5 passage in which the student is asked, "What is an oily fish that seals like?" The answer to this question is directly stated in apposition to the word herring in the following sentence: "Holly started his training with a small herring - an oily fish which is a favorite with seals." (p.84).

The fourth IRI examined was the Classroom Reading Inventory. This IRI consists of four forms graded preprimer through sixth. There are five questions following each passage labeled vocabulary, factual, and inferential. This IRI does not include main idea questions. Fifty-six percent of the inferential questions were correctly labeled.

The final IRI analyzed was The New Sucher-Allred Reading Placement Inventory. There are two forms, graded primer through nine. Each passage is followed by five questions: main idea, facts, sequence, inference, and critical thinking. Ninety-four percent of the inferential questions were correctly labeled. All of the inferential questions in Form B were correctly labeled. One of the problems identified with the inferential questions was that some of them asked for explicitly stated information. For example, following the 3-1 passage, the student is asked this question: "What was the prince wishing as he was strolling?" The passage states, "Once upon a time a handsome prince was strolling down a garden path. He was wishing a lovely princess would come and marry

him." (p. 67). The answer to this question is clearly stated in the passage.

Conclusions

This study analyzed three types of questions from informal reading inventories: inferential, cause/effect, and main idea. Our analysis of main idea questions supported earlier studies (Duffelmeyer & Duffelmeyer, 1987; 1989) which found that many questions labeled as main idea were actually asking for the topic of the reading passage. Secondly, many IRIs still contain, especially at the lower levels, narrative passages which contain neither a stated or an implied main idea.

Four problems surfaced from our investigation of inferential questions. First, inference questions were often ambiguously worded which could lead readers to answer them inappropriately. Secondly, many labeled inference questions were asking for opinions from the reader. For example, after one third grade passage (Silvaroli, 1986) readers are asked, "What do you think was the most important thing this story told you about turkeys?" The third problem was the failure to ask the student to explain the reasoning supporting his/her answer to an inference question. Finally, many questions labeled as inferential were simply not inferential in nature. Answers to them were either stated directly in text or given as part of the motivation statement. Table 1 illustrates the results of the investigation of IRI questions.

[Insert Table 1 here.]

Only two of the IRIs studied (Analytical Reading Inventory and Burns & Roe Informal Reading Inventory) included cause/effect questions. These questions were labeled correctly by the authors of the tests more often than the other type of questions studied. There was some inconsistency within tests as to explicit and implicit responses. That is, not all passages required the same task of readers in response to cause/effect questions. While some of the cause/effect questions were actually asking for the wrong skill (i.e., sequencing). Table 2 illustrates the results of the investigation of cause/effect questions.

[Insert Table 2 here.]

A final area investigated by this study was the consistency between forms of the test. Forms A and B were examined to determine if inference and cause/effect questions were asked in the same manner on both forms and whether there were equivalent numbers of specific questions on matching passages. This study revealed that for some tests forms were inconsistent. For example, the Analytical Reading Inventory has inference labeled questions at levels 1. 2, and 3 on Form A but none of these at the same levels on Form B.

The results of this study should raise concern among teachers

and reading specialists about the diagnostic validity of the comprehension questions on IRIs. Previous research indicates the danger of placing students in comprehension subskill areas based on the few questions from an IRI. If a high percentage of these questions are inaccurately labeled, as the present study suggests, the advisability of placement in subskill work is even more greatly diminished. Teachers may continue to place children in leveled materials and to analyze miscues on oral reading. However, a more open-ended questioning or retelling format would allow a more accurate evaluation of the child's comprehension of a specific passage.

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Table 1

Analysis of inferential questions

	Form A	Form B	Overall
Analytical	100%	100%	100%
Basic	84%	60%	71%
Burns & Roe	95%	92%	89%
Classroom	72%	44%	56%
Sucher-Allred	88%	100%	94%

Table 2

Analysis of cause/effect questions

	Form A	Form B	Overall
Analytical	82%	88%	84%
Burns & Roe	100%	100%	100%