

PIRLS

NATIONAL READING LITERACY

# PIRLS

## 2011 IMPLEMENTING GUIDELINES

Ina V.S. Mullis, Michael O. Martin,  
Ann M. Kennedy, and Kathleen L. Truong



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Research  
Study Center  
Lynch School of Education, Boston College

IEA, 2011



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## Introduction

PIRLS, IEA's Progress in International Reading Literacy Study, assesses reading achievement at the fourth grade across a large number of countries, cultures, and languages. PIRLS is designed to help countries improve the teaching and learning of reading. Our goal is to provide policy makers and educators with the information they need to help all students become better readers.

Data from the PIRLS assessments are used to:

- Evaluate how well students can read
- Monitor progress over time in reading achievement
- Relate achievement to home and school factors to provide information for educational improvement.

One major task of the 2nd meeting of the PIRLS National Research Coordinators (NRCs) in Amsterdam, the Netherlands, is the selection of literary and informational passages for the PIRLS 2011 field test. To help ensure that the best possible items are developed for the passages, the TIMSS & PIRLS International Study Center is conducting an item writing workshop in conjunction with the NRC meeting to write items for the selected passages. In this workshop, participants will be organized into groups

To facilitate the success of the workshop and the item

## Writing Items for PIRLS 2011

Currently the plan is to develop two new literary passages and items and two new informational passages and items for PIRLS 2011. To ensure that we have enough excellent passages for each purpose, we plan to field test twice as many passages as needed for the assessment.

Thus, we anticipate the field test for PIRLS 2011 will include:

- 4 literary passages and items
- 4 informational passages and items

### Item Formats

The two item formats used most in PIRLS are multiple-choice and constructed-response. About half of the items you develop should be multiple-choice and half should be constructed-response.

- **Multiple-choice items** allow valid, reliable, and economical measurement of a wide range of cognitive processes in a relatively short testing time.
- **Constructed-response items** allow students to demonstrate behaviors such as supporting an answer with evidence, explaining characters' actions, describing an event or procedure, and making predictions.

Other item types also can be used as long as they provide valid measures and are feasible to administer and to score reliably. These types of items may include asking students to:

- Number the sequence of events in a passage.
- Match characters to their actions or what they said (quotes).
- Complete information in a table.

## Number of Items and Score Points per Passage

To have a reliable measure of reading comprehension, each passage should have questions worth a total of at least 15 score points. Considering that items sometimes are deleted during the field testing and review process, please write items totaling 18-20 score points per passage. On average, this will be 12 to 14 items per passage.

- Multiple-choice questions are worth one point.
- Constructed-response questions are worth 1, 2, or 3 points, depending on the depth of reading understanding required.

**Figure 1: Target Percentages of PIRLS 2011 Assessment Devoted to Reading Purposes and Processes**

| Purposes for Reading   |     |
|--|-----|
| Literary Experience  | 50% |
| Acquire and Use Information                                  | 50% |
| Processes of Comprehension                                   |     |
| Focus on and Retrieve Explicitly Stated Information          | 20% |
| Make Straightforward Inferences                              | 30% |
| Interpret and Integrate Ideas and Information                | 30% |
| Examine and Evaluate Content, Language, and Textual Elements | 20% |

### Purposes for Reading

The classification of items according to the two purposes is done at the passage level. Each PIRLS passage has been selected to measure literary or informational reading. To meet the targets specified in the framework, 50% of the assessment items must be literary and 50% must be informational.

## Processes of Comprehension

Within the literary and informational purposes, PIRLS assesses four types of reading comprehension processes. In developing items, please pay particular attention to the percentage of assessment score points allocated to each prot





## Informational Text Maps

Since PIRLS uses a wide variety of articles, texts, and graphic presentations about various topics, the maps for the informational texts take different forms. The map shows the organizational structure of the text and the hierarchy of information within it. For example, the passage may include a central purpose, main ideas, overarching concepts, explanations, examples, and supporting details. Possible structures include main ideas followed by examples and supporting details, chronological sequences, and comparison/contrast, cause/effect, or problem/solution relationships. Informational texts often are combinations of two or more organizational structures, and the different sections can have different structures.

Appendix A provides a model and example text map for a literary text. Appendix B provides models and examples for five

2.





A gender-related context included in an item may distract some students from the purpose of the item. Situations in which stereotypical roles or attitudes are unnecessarily attributed to males or females, or in which there is implicit disparagement of either gender, are not acceptable.

### Facilitating Comparable Translation

The international version of items will be in United States English. After review and revision, the items selected are then translated from English into the languages of instruction of the countries in the study. Therefore, be sensitive to issues that might affect how well items can be translated to produce internationally comparable items.

### Writing Multiple-Choice Items

A multiple-choice item asks a question or establishes the situation for a response. This type of item provides a limited number of response choices, or options, from which the correct answer is selected. A multiple-choice item is characterized by the following components:

- The *stem* is the initial part of the item in which the task is defined.
- The *options* refer to the entire set of labeled response choices presented under the stem.
- The *key* is the correct response option.
- The *distracters* are the incorrect response options.

The next sections present guidelines specific to multiple-choice items, including writing the stem, structuring the response options, and developing plausible distracters.

## The Stem

For PIRLS, since the students are relatively young and clarity is of vital importance, please phrase all stems as a *question*.

Example of a stem formulated as a *question*:

(A)

(B)

(C)

(D)

1. Provide sufficient information in the stem to make the task clear and unambiguous to students. Students should be able to answer the question before reading the options.
2. The stem should not include extraneous information. Extraneous information is liable to confuse students who otherwise would have determined the correct answer.
3. Do NOT use negative stems – those containing words such as NOT, LEAST, WORST, EXCEPT, etc. If it is absolutely necessary to use a negative stem, highlight the negative word, (e.g., capitalize, underline, or put in bold type so that it stands out for the student). If the stem is negative, do NOT use negative response options.
4. If there is not one universally agreed upon answer to the question, it is best to include “of the following” or some similar qualifying phrase in the stem.

## Structure of the Response Options (or Alternatives)

1. As shown in the “Labon” example above, multiple-choice items for PIRLS have four response options, labeled A–D.
2. Make sure that one of the four response options or alternatives is the correct or best answer. Make sure there is only one correct or best answer. For example, response options cannot represent subsets of other options. Also, do not use subsets of response options that together account for all possibilities (e.g., day and night).







Example 1: Give numbered spaces for their answers.

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Example 2: Provide a multiple-choice yes/no or agree/disagree response space way to help students get started.

Ⓐ

Ⓑ

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Example 3: Provide a sentence structure for students.

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## Writing a Full-Credit Response to the Question

As you are writing a constructed-response item, please write a full-credit answer to the question in terms of the language, knowledge, and skills that a fourth grade student could be expected to possess.

This is an essential first step in producing a scoring guide and testing the viability of the question. If you cannot answer the question or disagree among yourselves, then the question should be reconsidered. In any case, thinking of the answer simultaneously with developing the question usually results in revisions to the item to clarify its purpose and improve the quality of information that can be obtained from student responses. Writing the answer also provides guidance about the number of score points to allocate to the item.

Passage dependency is very important in considering the quality of students' responses to constructed-response items. The plausibility and completeness of a response should be considered with regard to the focus or main points of the text. Students' answers should be text-based to receive credit. Because of this, make sure the information is in the text. For example, if only two reasons or examples are given in the text do not ask students to supply three of them.

## Developing Scoring Guides

Scoring guides with well-defined criteria for assigning score points are essential to ensure scoring reliability for scoring constructed-response items. Each constructed-response item needs a unique tailored scoring guide that:

- Provides a clear description of the requirements for a fully correct response.
- Defines parameters for partial-credit level(s) (if applicable).

In defining levels of partial credit, consider the accuracy and completeness of the information provided. Students' answers can provide insights into what they know and are able to do, and how they utilize their knowledge and skills to understand what they read.

The distinction between the levels of partial credit should reflect students' skills in a meaningful way.

The next section provides the generalized scoring guides or templates for each of the score-point levels. The section after that presents actual examples from PIRLS 2006 of how the generalized guides or templates were operationalized for specific one-, two-, and three-point constructed-response questions.

### The PIRLS Generalized Scoring Guidelines

Students' answers to the constructed-response questions are evaluated according to scoring guides that describe specific aspects of the response, which are considered to be evidence of performance at a particular score level. Although each guide is tailored to a specific comprehension question, there are commonalities across all the guides. For example, the lowest score level in each guide — a score of 0 — represents no comprehension of the aspect of the text being assessed by the question. Responses that receive a score of 0 may represent a misunderstanding of the text or the question, or include only information that is so vague that assigning a higher score is unwarranted.

Figures 2 through 4 contain the generalized scoring guides for one-, two-, and three-point questions, respectively. Each of the guides describes the degree or nature of comprehension associated with each score level in that guide. The score point labels vary across the three guides in order to distinguish them from each other, and to convey the range of comprehension abilities being described in each guide. These generalized scoring guides are the basis for the unique guides developed for each comprehension question in the assessment.

**Figure 2: Generalized Scoring Guide for One-Point Questions**

|   |
|---|
| <b>Acceptable Response (Score = 1)</b>  |
| These responses demonstrate comprehension of the aspect of text addressed in the question. They include all elements required by the question. The responses are determined to be accurate based on ideas or information in the text.   |
| <b>Unacceptable Response (Score = 0)</b>  |
| These responses do not demonstrate comprehension of the aspect of text addressed in the question. They may attempt to provide some or all of the elements required by the question. The responses, however, are determined to be inaccurate based on information or ideas in the text. Or, they include only ideas or information that are too vague or unrelated to the question to be considered accurate.<br><br>Also give a score of "0" to uninterpretable responses. This includes crossed-out and erased attempts, illegible and off-task responses, and drawings and doodles. |

**Figure 3: Generalized Scoring Guide**







of one. This statement provides only general guidance for making scoring decisions. Specific examples of expected student responses are listed, although these examples are not an exhaustive list of all possibilities.

Figure 5: Example Scoring Guide for a One-Point Item

*Unbelievable Night, Item 6*

Purpose: Literary

Process: Make straightforward inferences

**1 – Acceptable Response**

The response demonstrates an understanding that the flamingos were food to the crocodile.

**Examples:**

- To feed the crocodile.
- So the crocodile would eat them and not her.
- Because they would

**Figure 6: Example Scoring Guide for a Two-Point Item**

*Unbelievable Night, Item 8*

**Figure 7: Example Scoring Guide for a Three-Point Item**

*Unbelievable Night, Item 11*

## 1 – Partial Comprehension

The response provides an appropriate description with a reason that is vague or general.

**E** . . . . :

- Anina was clever. She used the magazine.

Or, the response provides at least one appropriate description without a reason.

**E** . . . . :

- Anina was a fast thinker.
- She was clever and brave.

Or, the response provides at least one appropriate reason without a description.

**E** . . . . :

- Anina barricaded herself in her room. Anina pushed her bed against the door.
- She let the flamingos out of the magazine and she got the crocodile to go back to its home in the magazine.

## 0 – No Comprehension

The response provides a description that is too vague to be considered appropriate without textual support.

**E** . . . . :

- Anina was sad that the flamingos were eaten.
- Anina was happy. [Note that happy and nice without further explanation is not acceptable]

## Appendix A: PIRLS Literary Text Map

Figure A.1 Model – PIRLS Literary Text Map

### *Theme(s)*

Readers may interpret the theme(s) of a passage from a relatively literal to a more abstract level. Thus, it sometimes is useful to identify what might be considered the main idea of the passage as distinct from the more abstract message or moral that might be learned.

**Main Idea:** This is a generalization of a concept, process, phenomenon, or position based on the text of the story.

**Abstract:** This is a translation beyond the story to the level of a message, moral, or lesson learned.

### *Plot*

**Summary:** This is a short summary of the major focus or story events. The plot is the central story line. It describes the main problem or desired goal of the central character(s) and how the problem is resolved or the goal is achieved. For example, the plot summary could describe the essential problem/conflict/resolution or the need/action taken/outcome.

**Structure:** Notable features of the story structure may be noted here, such as flashback, satire, or a surprise ending.

### *Major Event or Episodes*

This part of the map can be quite lengthy. It describes the sequence of actions, feelings, and thoughts portrayed in the story.

*Major Characters*

(listed with their traits and functions as appropriate)

Names

Traits

Functions

*Setting(s)*

is describes the physical location of the story. Also, if pertinent, the importance of the location of the story in relationship to the theme(s).

*Key Expressions*

Figure A.2 Example Literary Text

# Sam Who Went to Sea

*by Phyllis Root*









in the spring when his boat is finished, the other rats bring presents and see Sam off as he sets sail to sea. The other rats watch the river in vain for his return and mourn what they assume to be his demise. But Sam is sailing happily on the sea of his dreams. He sends them a message in a bottle telling them not to worry, that he is happy sailing on and on over the wild green sea.

### *Major Events or Episodes*

- Sam dreams of the sea as he mends his garden fence.
- Mr. Ropegnawer and Mrs. Seednibbler badger Sam to fix his fence and weed his garden.
- Sam sees an ad in a newspaper and saves money to buy the plans for building a boat.
- As Sam works hard at building the boat, his neighbors tell him that the river is too small for a boat and they question why he would want to go to sea.
- Sam responds that the sea is in his blood and that all rivers lead to the sea.
- Mrs. Seednibbler tells Sam that rats were meant to have their paws planted firmly on the ground.
- Sam responds that his ancestor sailed on the Mayflower.
- Sam's friends issue dire warnings: Sam will be eaten by a shark or attacked by seaweed.
- Sam just smiles and continues to work on the boat through the winter.

- In the spring, the boat is ready and Sam bids farewell to his friends. They accept that he is going and offer him gifts, and ask whether he will be back in time to rake his leaves.
- Sam's friends tearfully wonder if he will ever return.
- Eventually, they give up watching the river for Sam to return. They assume he has been eaten by a shark.
- Sam sails out to sea, happy and singing. He writes his friends a note telling his friends not to worry and that he is very happy. He puts the note in a bottle and then throws it into the waves and continues sailing out to sea.

### Major Characters

#### Traits

- dreamy/imaginative
- determined
- independent
- resourceful
- capable
- self-reliant
- courageous
- happy

#### Function

central character: shows the power of imagination and self-reliance

### *Setting*

Set in a riverside community. The river sets up main character's motivation, since it leads to the sea.

### *Key Expressions*

#### Vocabulary:

- rickety
- scrimped
- mu er
- mournfully
- crests
- supremely

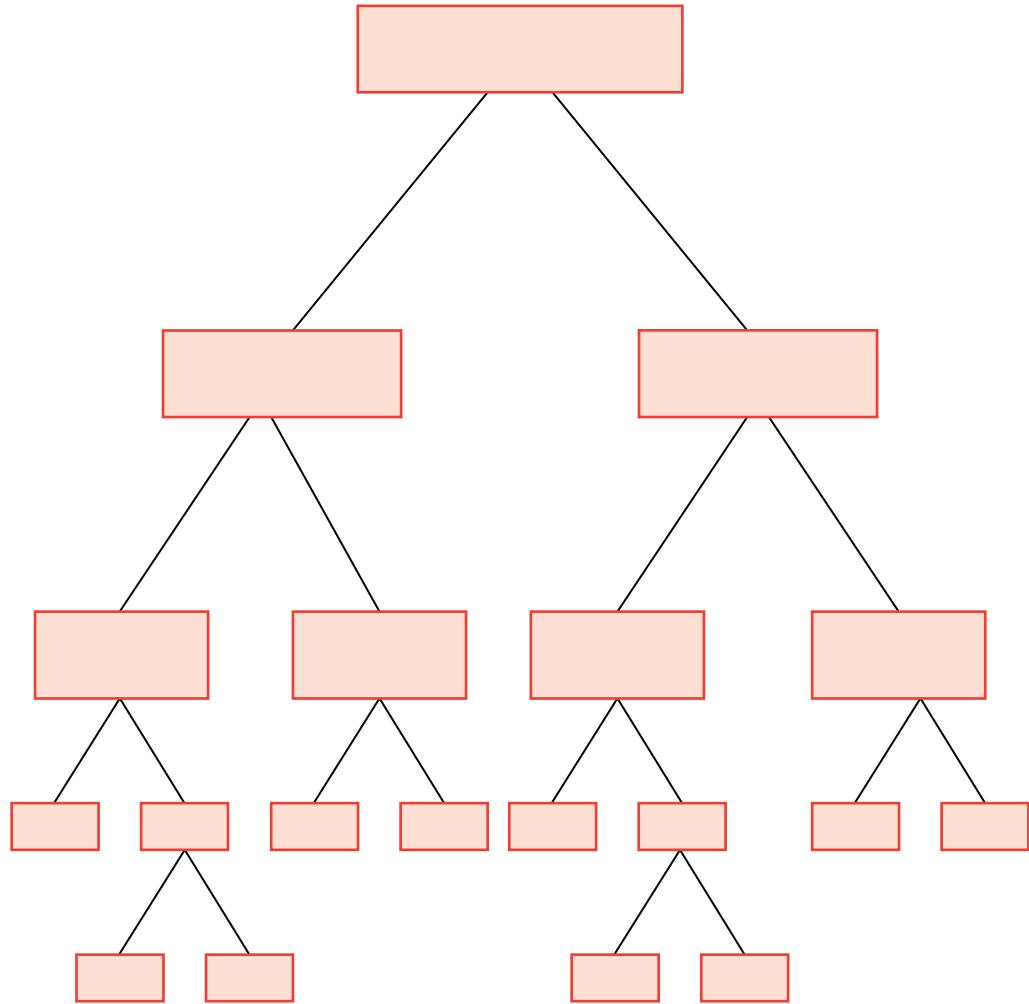
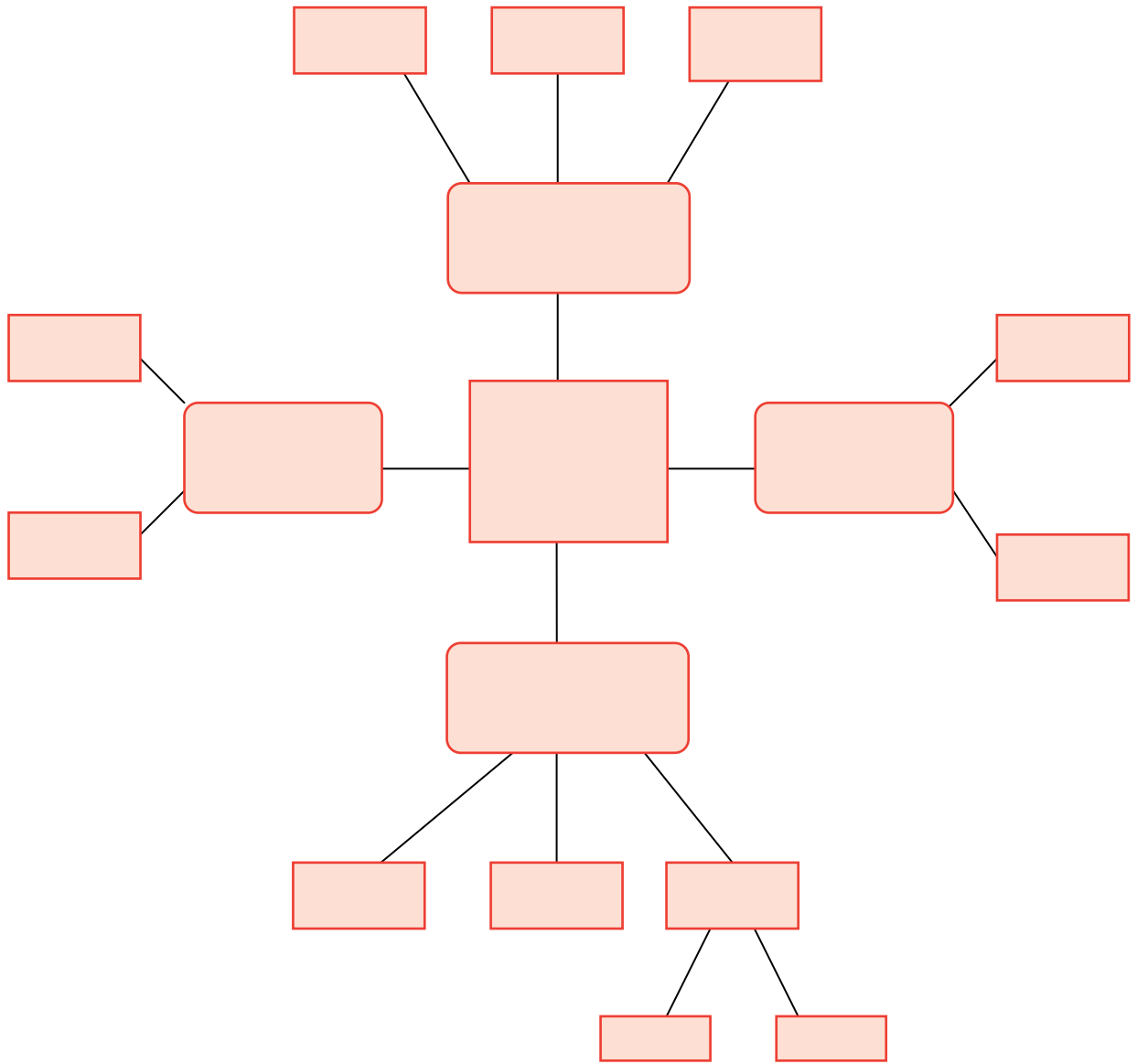




Figure B.3: Thematic Model – PIRLS Informational Text Map







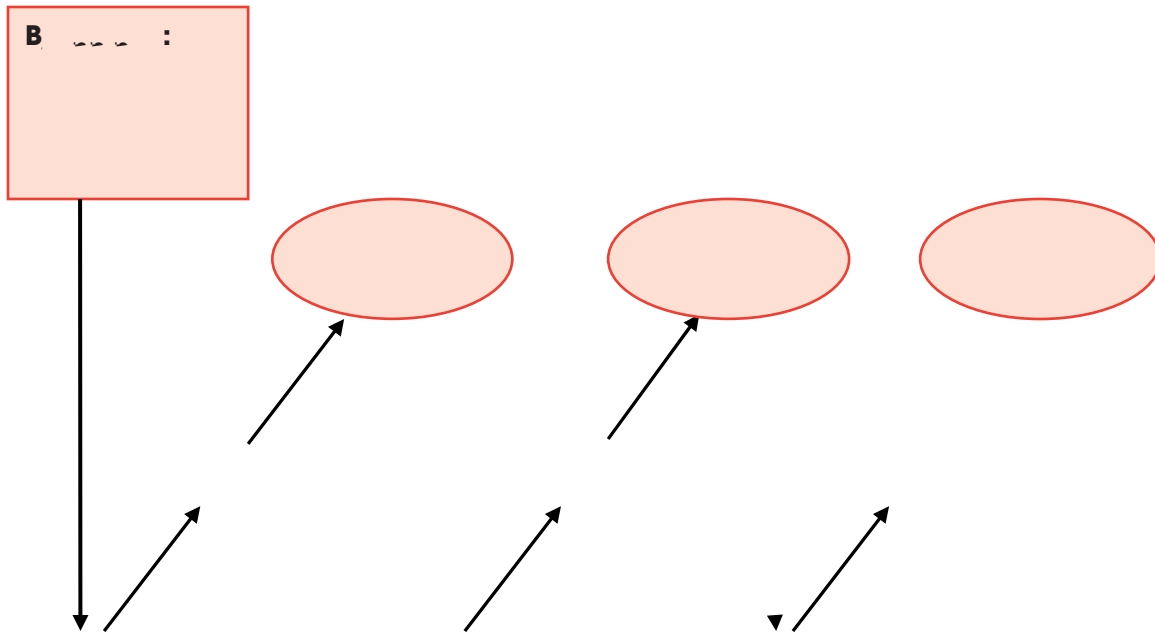




Figure B.7: Sequential Episode Model – PIRLS Informational Text Map

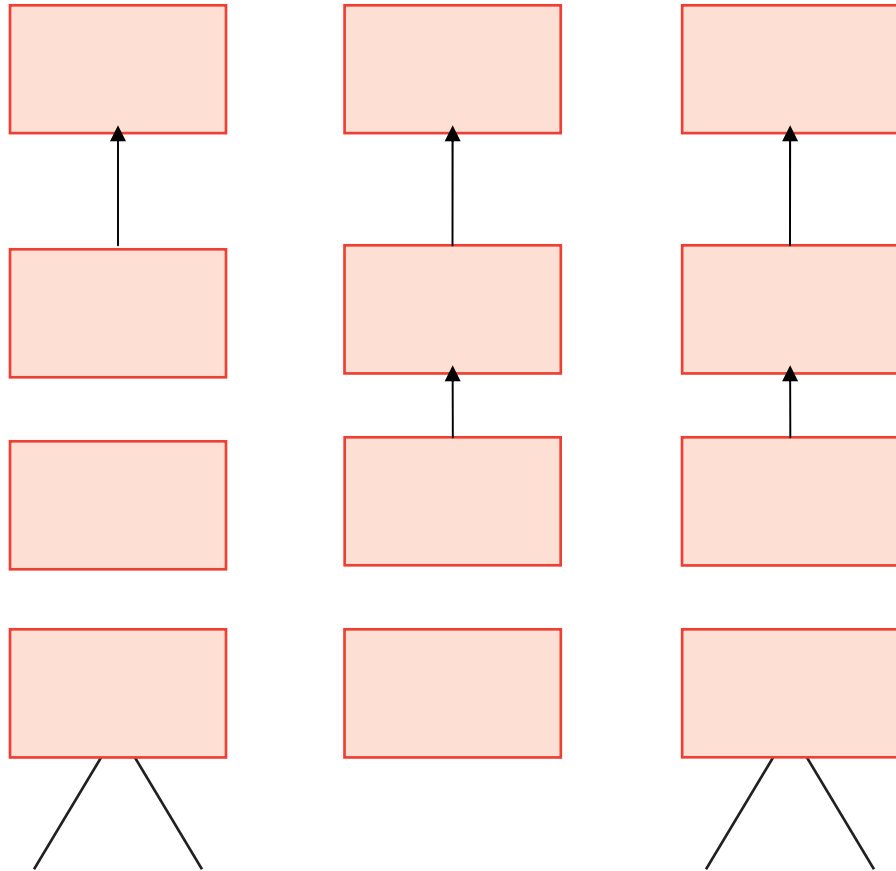




Figure B.9: Compare/Contrast Model – PIRLS Informational Text Map

