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**AT THE HEART OF COMMUNICATION**  
across disciplines and around the world



### ***Assessing the Complexity of Literacy Tasks:***

***A guide to analysis with  
examples and exercises***

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# RATING GUIDE

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# Rating Guide \*

## Step 1

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**Identify the task(s) to be considered.** In any document, some of the literacy tasks associated with using it are clearly beneath the level where analysis is necessary. Other tasks are more complex and critical to the successful use of the document.

The form on the next page (p. 32) can be used as a guide for the rating. Photocopy as many copies of the form as you have tasks to rate.

## Step 2

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**Decide whether the task has the feature of a *Prose, Document use, or Quantitative task*.** Remember that many quantitative tasks also have a ‘document use’ component. Use your judgement to decide which part of the task adds most to task difficulty.

## Step 3

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- Rate each complexity factor appropriate to the type of task on the chart provided.** The charts and rubrics you will need to complete the ratings can be found on pages 33 to 41. To help you identify which chart is used for which task, the following symbols are used:

**P**

**D**

**Q**

Task type:

Prose

Document

Quantitative

## Step 4

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**Compare the combined ratings for each task with the typical values for each IALS level in the chart on page 42** to arrive at an estimate of complexity. Enter the estimate at the bottom of the rating chart.

\* Rating charts and rubrics in this section adapted from: Mosenthal, P. and Kirsch, I. (1994). *Defining the Proficiency Standards of Adult Literacy in the US: A Profile Approach*

# Rating Chart - Task Complexity

Document \_\_\_\_\_

Task Description \_\_\_\_\_

Notes \_\_\_\_\_

## Complexity of Cognitive Processing (Ratings)

Task Type	<b>P</b> Prose	<b>D</b> Document	<b>Q</b> Quantitative
Type of information (p33)			
Type of match (pp3-36)			
Type of operation (p37)			
Specificity of Operation (p38)			
Plausibility of distractors (p39)			

**Total of processing complexity ratings** \_\_\_\_\_

**Complexity of document rating (p41)** + \_\_\_\_\_

**Total rating (processing + document)** = \_\_\_\_\_

**Predicted complexity level (IALS) (p42)** \_\_\_\_\_

# Type of Information



Use the chart below to rate the 'type of information' factor in prose and document processing tasks

Type of Information	Rating
person, animal, place (noun, not relationship), thing	<b>1</b>
amounts, times, attributes, types, actions, locations	<b>2</b>
manner, goal, purpose, alternative, referent for a pronoun, predicate adjective	<b>3</b>
cause, effect, reason, result, similarity, explanation	<b>4</b>
equivalence, difference, theme or pattern.	<b>5</b>

# Type of Match



Two scoring ‘rubrics’ are provided on the following two pages. One is for ‘type of match’ in prose processing tasks; the other is used for rating ‘type of match’ document processing tasks.

## Using the Scoring Rubrics

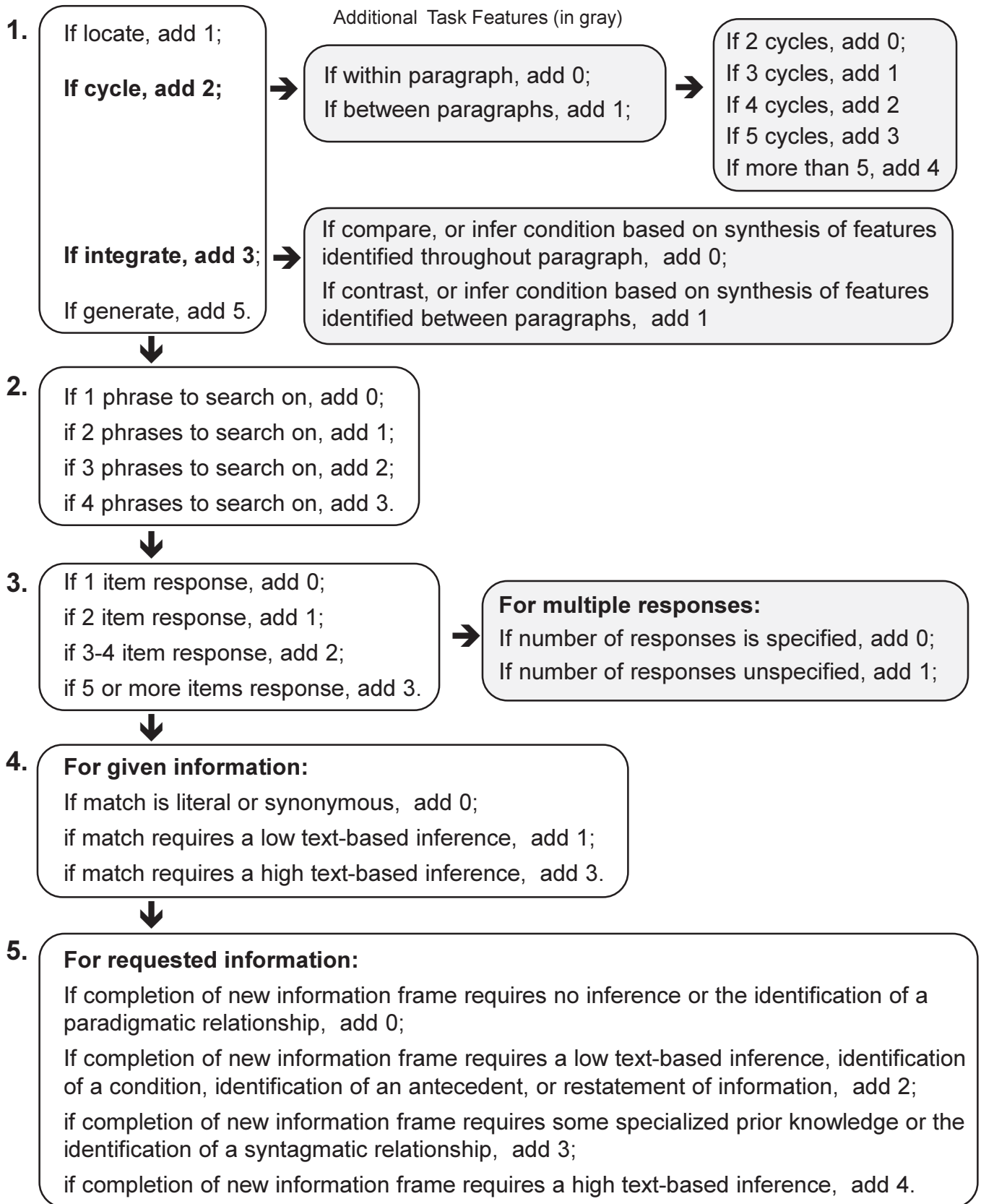
The scoring rubrics for ‘type of match’ in prose and document tasks use an additive scheme for scoring. To use the rubrics, start at the top statement in the chart and read down. When the statement applies to the task under consideration, add the value indicated. Use a piece of scratch paper to keep track of the total.

You will immediately see that under the right conditions, the total score using these rubrics might reach as high as 20 for some hypothetically difficult task. However, in real life literacy tasks, the total score usually ranges from 1 to 7.

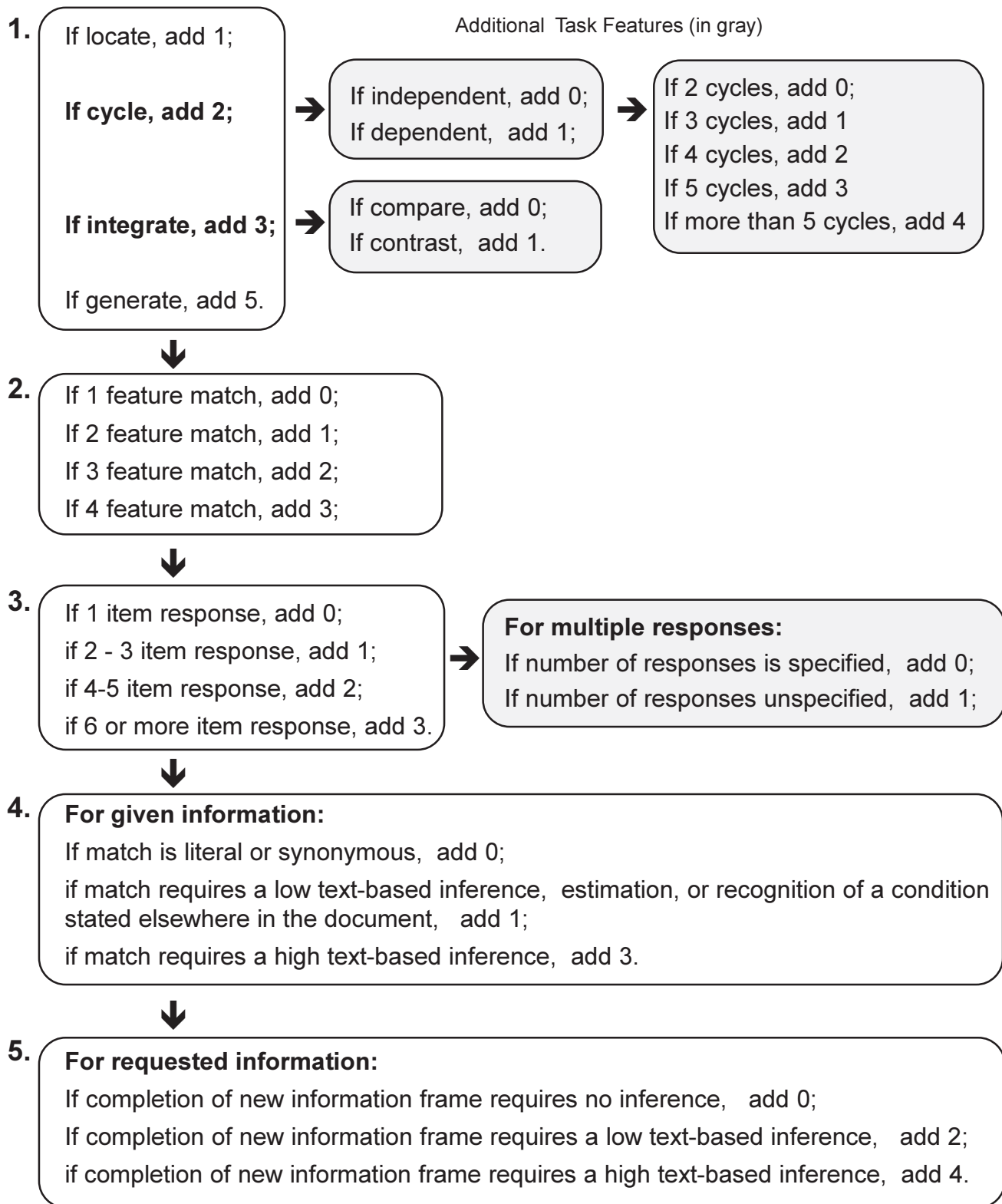
Your rating should follow the rubric from top to bottom:

Item	Task Feature	Score
1.	Cycle +3 → Between paragraphs +1 ↓	4
2.	3 Search phrases +2 ↓	2
3.	2 Item response +1 ↓	1
4.	Synonymous match +0 ↓	0
5.	Requested information frame requires inference +2	2
<b>Total (All above) =</b>		<b>9</b>

# Type of Match in Prose Processing



# Type of Match in Document Processing





# Quantitative Factors

## Type of Operation Specificity of Operation

Use the chart on this page and the 'additive rubric' on the next page to rate the two factors important to the complexity of quantitative processing

### Type of Operation



Type of Operation	Rating
Single addition	<b>1</b>
Single subtraction	<b>2</b>
Single multiplication	<b>3</b>
Single division	<b>4</b>
Combined operations	<b>5</b>

# Specificity of Operation



1. If numbers are in row and column format, add 0  
If numbers are not in column format, add 1;



2. If numbers are adjacent, add 0  
If numbers are not adjacent, add 1



3. If labels and amounts are identified without a search, add 0;  
If labels are present and amounts identified with a search, add 1;  
If labels are inferred and amounts identified with a search. add 2;



4. If operation is identified by +, -, x, or (divide symbol), or states 'add (or total),' 'subtract,' 'multiply,' or 'divide,' add 0;  
If semantic relation is stated, e.g. 'how much more,' 'how much less,' 'how many times,' 'calculate the difference,' add 1;  
If operation is easily inferred, e.g. 'how much is saved,' 'deduct,' add 2;  
If operation is based on known ratios, e.g. 'percent of,' add 3.



5. If numbers are present, add 0;  
If numbers entered or identified in previous task, add 1;



6. If units require no transformation, add 0  
If units require transformation, e.g. time to fraction of an hour, or require converting to common units, e.g. fractions, add 1

# Plausibility of Distractors



Distractors	Rating
No plausible distractors	<b>1</b>
Plausible distractors for <u>either</u> requested or given information (but not both) appear in a paragraph (including the paragraph in which the answer is located), or distractors arise, as a result of invited inferences based on information in the paragraph in which the answer is located.	<b>2</b>
Plausible distractors for <u>both given and requested</u> information appear in <u>different nodes</u> , one of which may be the paragraph where the answer is located.	<b>3</b>
a) Plausible distractors for both given and requested information appear in the <u>same paragraph</u> but other than the one containing the answer; or,  b) distractors represent the opposite condition to what is established in the question or directive, and these distractors appear in a paragraph other than the one containing the answer.	<b>4</b>
a) Plausible distractors for given and requested information both appear in the <u>same paragraph</u> as the answer; or,  b) when plausible distractors represent the opposite condition of what is established in the question or directive and these distractors appear in the same paragraph as the answer.	<b>5</b>

# Plausibility of Distractors



Distractors	Rating
No plausible distractors	<b>1</b>
There are <u>multiple items</u> in the list being searched for requested information, or there are <u>labels for other lists</u> that bear resemblance in kind to the label being used as a search term.	<b>2</b>
One or more features from both given and requested information appear in <u>different</u> matrix cells or in lists other than the cell or list in which the answer actually appears.	<b>3</b>
One or more features from both given and requested information appear in the same matrix cell or list but <u>not</u> in the answer node	<b>4</b>
One or more features in from both requested and given information appear in the <u>same matrix cell or list as the answer</u> .	<b>5</b>

# The PMOSE/IKIRSCH Document Readability Formula

**Structure**

Score 1 if *simple-list* structure.  
 Score 2 if *combined-list* structure.  
 (also includes *pie charts and time lines*).  
 Score 3 if *intersected-list* structure.  
 (also includes *bar charts line graphs and maps*).  
 Score 4 if *nested-list* structure.  
 (also includes *bar charts and line graphs with nested labels*).

**Density**

Labels Score 1 if 15 or fewer labels.  
 Score 2 if 16 to 25 labels.  
 Score 3 if 26 to 35 labels.  
 Score 4 if 36 to 46 labels.  
 Score 5 if more than 46 labels.

Score 1 if 75 or fewer items.  
 Score 2 if 76 to 125 items.  
 Score 3 if 126 to 175 items.  
 Score 4 if 176 to 225 items.  
 Score 5 if more than 225 items.

**Dependency**

Add 1 if document makes reference to information in a related document or as a dependency.

Document Structure Score

Number of Labels Score +

Number of Items Score +

Dependency Score +

Total Score =

## Document Complexity Level

(Circle total score below to determine a documents complexity level)

<b>3 4 5</b>	<b>6 7 8</b>	<b>9 10 11</b>	<b>12 13 14</b>	<b>15</b>
<b>Very Low</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Very High</b>

Adapted from: Mosenthal, P. and Kirsch I. (1998). A New Measure for Assessing Document Complexity: The PMOSE/IKIRSCH Document Readability Formula. *Journal of Adolescent and Adult Literacy*, 41:8. pp 638-657

# Determining IALS Level

When all the processing factors for a task have been rated, they should be totalled and compared with the typical complexity value ranges to estimate an IALS level.

<b>Combined Rating</b> (ToI + ToM + PoD) (ToO + SoO +PoD)	<b>IALS Level</b> (Estimate)
<b>0 - 6</b>	<b>1</b>
<b>7 - 8</b>	<b>2</b>
<b>9 - 10</b>	<b>3</b>
<b>11 - 13</b>	<b>4</b>
<b>14 - 16</b>	<b>5</b>

## For Complex Documents

If the document is being considered is unusually complex, rate its complexity using the PMOSE/IKIRSCH Document Readability Formula. Add to the rating for cognitive processing (on all tasks required by the document) according to the following scheme:

If the document's complexity rating is *low* or *very low*, add 0

If the document's complexity is *moderate* or *high*, add 1

If the document's complexity is *very high*, add 2

## Notes

*In quantitative tasks, it is assumed that the 'type of information' will always be amounts or quantities, so this factor is ignored for these tasks.*

*If the combined ratings of a task exceed 16, it is clearly off the IALS scale. The IALS scale was calibrated to 'observed' literacy skills among the general population and does not address the extremes of literacy complexity. Undoubtedly there are tasks that can only be completed by people with skills above level 5 (some very small number of Canadians).*



Plain Language: The International Pilgrimage

## **Michel Gauthier**

[www.hrdc-drhc.gc.ca/common/home.shtml](http://www.hrdc-drhc.gc.ca/common/home.shtml)

Michel Gauthier managed client service programs for Revenue Canada from 1974 to 1999. In 1993, he received the top award from the Governor General of Canada for developing and implementing Revenue Canada's correspondence system. In 1999, he joined Human Resources Development Canada, where he is responsible for making the Income Security Program's communications easier to read. He has delivered more than 175 literacy and plain language presentations across Canada. He received the 2002 award for Staff Service Excellence in the field of plain language.