**Just Do It—The Reading Version**

**Presented to Bethel University Faculty**

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**Harvard Thinking Routines**

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The following routines are based on work found in this text: Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners.* San Francisco: Jossey-Bass.

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| ***1. Compass Points***(Ritchhart, Church, & Morrison, 2011)  The purpose of this Harvard Thinking Routine is to help students methodically process, explore, and evaluate an idea or proposition. Begin by presenting students with a proposition/idea and drawing a compass on the board, labeling each point thus:   1. E = Excited   What excites you about this idea or proposition? What’s the upside?   1. W = Worrisome   What do you find worrisome about this idea or proposition? What’s the downside?   1. N = Need to Know   What else do you need to know or find out about this idea or proposition? What additional information would help you to evaluate it?   1. S = Stance or Suggestion for Moving Forward   What is your current stance or opinion on the idea or proposition? How might you move forward in your evaluation of this idea or proposition?  This order is generally the easiest for students to follow, beginning with the positive points and then moving deeper. Another option would be to ask students to evaluate the proposition prior to going through the compass points, and then ask them how their thinking changed after completing the compass point discussions.  ***2. CSI: Color, Symbol, Image Routine***– (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine challenges students to engage in a different type of thinking by having them communicate the essence of an idea non-verbally. After students read, watch, or listen to something, ask students to choose three things that stood out most to them and have them do the following:   1. For one item, choose a color that best represents or captures the essence of the main idea. 2. For another item, choose a symbol that best represents or captures the essence of the main idea. 3. For the last item, choose an image that best represents or captures the essence of the main idea.   After completing this portion of the activity, have students pair up and share their colors, symbols, and images, explaining their reasoning for each choice, and facilitating discussion of the topic at hand. It is good if students have had some experience identifying main ideas in text prior to this activity. This activity can be used as an accompaniment to reading, watching, or listening to foster comprehension or as an avenue for reflecting on previous lessons or events.  ***3. Generate, Sort, Connect, Elaborate: Concept Maps*** - (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine helps students engage in a different type of thinking by bringing to the surface prior knowledge to help generate new ideas about a topic and make connections between those ideas. Concept maps are unique in that they allow students to organize their thinking in a non-linear manner. It is helpful to follow these four steps in helping students create concept maps:   1. Generate a list of ideas and initial thoughts that come to mind when you think about this particular topic/issue. 2. Sort your ideas according to how central or tangential they are. Place your central ideas near the center and more tangential ideas toward the outside of the page. 3. Connect your ideas by drawing connecting lines between ideas that have something in common. Explain and write in a short sentence how the ideas are connected. 4. Elaborate on any of the ideas/thoughts you have written so far by adding new ideas that expand, extend, or add in any way to your initial ideas.   This activity can be used as a pre-assessment at the beginning of a unit depending on the students’ background knowledge of the topic, or as an ongoing assessment during a unit to see how well students are grasping the information and synthesizing ideas. Concept maps can also be used progressively with students adding to it throughout a unit. It is also beneficial to students to discuss their maps in small groups or with a partner to help solidify and consolidate their ideas and also to gain other perspectives.  ***4. Connect/Extend/Challenge***(Ritchhart, Church, & Morrison, 2011)  The aim of this Harvard Thinking Routine is to help students make thoughtful connections between old knowledge and new knowledge and to evaluate their individual levels of comprehension. Have students respond to the following questions in each category:   1. Connect: How is the new information connected to what you already knew? 2. Extend: What new ideas did you get that extended or pushed your thinking in new directions? 3. Challenge: What is still challenging or confusing for you to understand? What questions, wonderings, or puzzles do you now have?   This activity can be used with the whole class, in small groups, or individually. If working in a group, have students share their ideas with one another or the whole class. In any case, it may be beneficial to keep a record of students’ ideas in the classroom, continually adding to the list to show progress and make their thinking active.  ***5. Tug of War*** *–* (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine helps students better understand and explore different sides of fairness dilemmas. It is interactive in nature and engages students in new kinds of thinking. The following four steps are a good way to implement this activity.   1. First, present students with a fairness dilemma. Draw a rope, or present an actual one, to illustrate the controversy being discussed. 2. Second, identify the controversy, which factors are “pulling” at either side of the dilemma. 3. Third, engage students by asking them to think about *why* each factor is “tugging” at one side or the other of the dilemma, identifying the strongest arguments. Perhaps ask students to decide which side they would most likely choose themselves. 4. Lastly, push students further by asking “what if” questions, encouraging them to explore the topic more completely.   This activity is best suited for the whole class, and is helpful for students in that it makes their thinking visible by providing visuals and fostering interaction.  ***6. Claim/Support/Question*** - (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine helps students learn how to reason logically and develop thoughtful interpretations of topics. Reasoning with evidence is especially emphasized, developing logical arguments to support claims. To begin, present students with a particular topic. Then, have students follow these steps to explore the topic thoroughly:   1. Make a claim about the topic – an explanation or interpretation of some aspect of the topic. 2. Identify support for your claim – things you see, feel, and know that support your claim. 3. Ask a question related to your claim – What’s left hanging? What isn’t explained? What new reasons does your claim raise?   This activity works well for individual students, small groups, and for whole group discussions. In large group discussions, each student should have the opportunity to share his or her insights to each question. Through this type of dialogue, students learn how to identify truth claims and explore strategies for uncovering truth.  ***7. What Makes You Say That?***– (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine teaches students to provide evidential reasoning for their observations. It helps students describe what they observe or know and then encourages them to formulate explanations. Through this exercise, students are also encouraged to recognize and understand alternative explanations and multiple perspectives. After presenting students with a particular concept or object, ask them the following questions:   1. What’s going on? 2. What do you see that makes you say that?   Because the questions in this routine are open and flexible, they can be implemented in virtually any subject area, and can also be useful when introducing a new topic or concept to gather student understanding. The hope is that students would internalize this routine of evidential explanation and begin to engage in this type of thinking and analyzing without being prompted.  ***8. See/Think/Wonder***– (Ritchhart, Church, & Morrison, 2011)  This Harvard Thinking Routine encourages students to explore works of art and other interesting objects (e.g., images, artifacts, topics, etc.). The routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry. Launch the routine by students to respond to the following three stems together at the same time:   1. What do you see? 2. What do you think about that? 3. What does this make you wonder?   The routine works well in group discussion but in some cases you may want to ask students to try the routine individually on paper or in their heads before sharing out as a class. Student responses to the routine can be written down and recorded so that a class chart or observations, interpretations and wonderings are listed for all to see and return to during the course of study. |  |

**Response Activities**

Susan L. Brooks, Ph.D.

**Purpose #1—Reading to absorb information**

**Response Activities:**

1. Give a traditional quiz, but add a reflection section—What did you understand? What do you need to revisit?
2. Competitive Quizzing e.g. Kahoot
   1. A good demo is available here: <https://www.youtube.com/watch?v=v2JbY979WUg>
   2. Create a Kahoot at [https://create.kahoot.it/?\_ga=1.55304491.182794996.1471793430#](https://create.kahoot.it/?_ga=1.55304491.182794996.1471793430%23)
3. Recycle quiz questions and concepts ala Make it Stick
   1. More about quizzes here: <https://ww2.kqed.org/mindshift/2014/10/16/studying-with-quizzes-helps-make-sure-the-material-sticks/>
4. Give the quiz questions before students start the reading so they have something to look for
5. Online low stakes quizzes
   1. Multiple attempts
   2. Worth full credit or zero—must get 100%
   3. Must take before class begins
6. Group Study Guide (crowdsourcing)

Choose big concepts or ideas and assign one to each student or let them choose. After reading, they each enter the information about their concept or idea together to create a class study guide on a [Google doc](https://docs.google.com/document/d/1-U6qZbpEtDZCIj6ODWUh8wuHQvu64FuxA38APrGHk6o/edit). They must sign their work and they are responsible to add to the study guide before and after class. Can do simultaneously or over a period of time. . .

1. Flash cards
   1. Student created or crowdsourced
   2. Good resource for digital flashcard tools at <https://elearningindustry.com/the-5-best-free-flashcard-creation-tools-for-teachers>
2. Concept maps
   1. Consider entering 3-4 concepts that you think are crucial to get students started
   2. Good resource for concept maps at <http://www.austincc.edu/adnfac/collaborative/onsite_conceptmap.htm>
3. Personalized chapter index or table of contents
   1. Include concept name, short description and page number
4. Mark the text or use sticky notes
   1. Check off during class that it’s done
   2. A helpful example is at

<http://staticsandstationery.tumblr.com/post/121342442521/textbooknotes>

**Purpose #2—Students read to become familiar with a text that you will be discussing further in class**

**Response Activities**  
1) Student-generated questions—Can be discussed as a whole class or have groups discuss their group members questions and choose one that they’d like to hear the whole class discuss.

1. Students bring a 3x5 card with a discussion question on each side. Teacher groups the questions and uses them as a basis for discussion.
2. Question Stems—students look at an array of question stems and choose several to develop questions (and answers if you wish). To find a good set of question stems, google Question Stems for \_\_\_\_\_\_\_\_\_\_ and insert the name of your discipline into the blank. Another good resource is found at <http://www.columbia.edu/cu/weai/exeas/resources/illustrative-question-stems.html>.
3. Question, Quotation, and Talking Point (Connor-Greene) Connor-Greene has her students type a one-page QQTP that includes “a question prompted by the assigned reading that day; a quotation from the reading selected as particularly compelling or controversial; and a brief outline of ideas prompted by the readings that the students can use as ‘talking points’ in class discussion. Find out more at <http://www.slu.edu/Documents/cttl/Resource%20Guides/Student-Generated%20Questions,%20Quotations,%20and%20Talking%20Points.pdf>

2) Ask the Author (Burke)—Respond to the reading by using these prompts:

What confuses me the most is. . .

A summary as I understand it. . .

If I could ask the author 2-3 questions about it they would be. . .

3) Question Sort (Harvard Thinking Routine)

a. Individually or as a group brainstorm a large set of questions on the topic and write each question on post-it notes or note cards

b. Create a horizontal continuum using masking tape on the table or draw one on the white board . This horizontal axis will represent generativity, that is, how likely the question is to generate engagement, insight, and deeper understanding. As a group, discuss and place each question on the horizontal line.

c. Create a vertical continuum (axis) bisecting the horizontal axis. This line represent how genuine, that is, how much we care about investigating it, the question is. As group discuss and place each question by moving the post-it note up or down on the vertical axis.

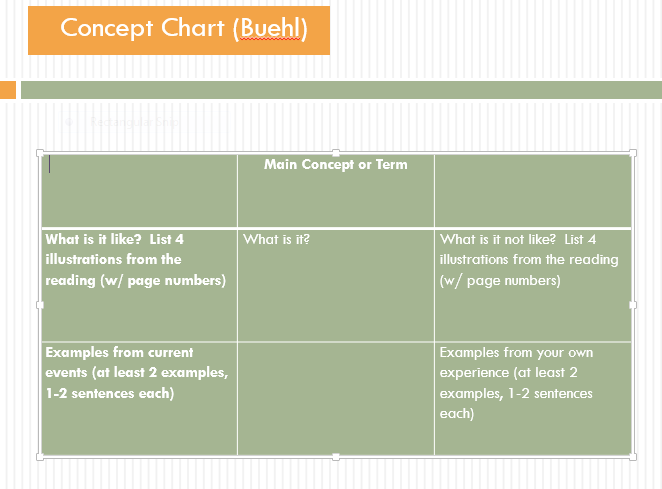
1. Discuss the ones that are in the “sweet spot” of generative and engaging.

4) Believing and Doubting Game (Elbow)—This allows students to examine an issue from multiple points of view. Here are the directions I use:

a.  As you read, make a list of at least 5 quotes or ideas which you believe or which resonate strongly with you (include page numbers).  Write a short (1-2 sentence) explanation for why you believe each one.

b.  Now read or look through the selection again, and make a list of at least 5 quotes or ideas which you doubt or which cause a strong negative reaction (include page numbers).  Write a short 1-2 sentence explanation for why you doubt each one.

5) Concept Chart—I usually give students one or two concepts that I want them to be sure to notice and then I have them choose an additional concept.



6) Intrigue Journal (Edutopia)

a. List the five most interesting, controversial, or resonant ideas you found in the readings. Include page numbers and a short rationale (100 words) for your selection.

7) Discussion Board Example:

a. This chapter addresses nature as a moral teacher.  The author asserts that hunting and fishing are ways that people can connect with nature.  Can a person be a nature lover and hunt, fish or harvest nature?  Why or why not?  Please write a substantive answer of at least 5 sentences which uses quotes and examples from the reading.  Then respond to at least 3 of your classmates in a way that moves the conversation forward.

8) The author says, I Say, and So (Buehl)

a. Teacher provides the original questions in the first column, then the second column is a quote, the third column is a reader response, and the fourth column integrates columns 2 and 3.

b. Here’s an example:

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| **Why is our modern culture so interested in speculative fiction right now?** | **p. 188—“Horror and fantasy were two of the top ten areas of interest out of a list of 49 categories.”** | **Adolescent readers seem particularly interested in this, although there are lots of adult books in these categories.** | **Perhaps we are afraid of our own world so we turn to another world for escape.** |

**Purpose #3--Learn more about writing and thinking in a discipline by reading a piece that can serve as a model or mentor text**

**Response Activities:**

1. Comparison
   1. Give students an excellent, fair and poor example of a text about a particular topic. Have them guess which is which and discuss/write a rationale for their choices.
   2. Students can build a rubric together from this discussion.
2. Examination of Technique
   1. Ask students to respond to a particular technique or strategy that the author uses
   2. Here’s an example:

In our upcoming class session we will be looking at how the author uses evidence.  As you read, think about the different ways that the author backs up his assertions.  Sometimes he tells stories, other times he uses statistical data, other times he cites sociological or psychological studies, etc.  Make a list of the five pieces of evidence that made the largest impression on you as a reader.  Next to each one, write a sentence or two that explains why each one was memorable.

1. Mark the Text
   1. Ask students to use a visual means—color, pattern, editing marks to depict the way that the author has put the text together. Include reflection.
   2. Here’s an example:

Choose a page from the selection that you read for today and take a closer look.  Gather your colored pencils or highlighters or create several different patterns.  On the page you chose, mark with a different color or pattern each different speaker or source.  When the author includes his own ideas, mark it with one kind of color or pattern.  When the author quotes a particular interview subject or study, mark it with another color or pattern. When the author quotes or refers to another interview subject or study, mark it with yet another color or pattern.  (Make a photocopy of a page in your book if you don't want to mark in your book.)

Write 2 paragraphs (at least 5 sentences each) discussing how the author mixes the various sources to make his points.  What did you find from this exercise?  How does the author integrate his own opinions and ideas with his source materials?  Is this effective for you as a reader?   Why or why not?

1. Recreating structure
   1. Ask students to create a drawing or a model of the structure that an author uses or the structure of a particular kind of writing. Limit the amount of words that they can use in their drawing so they must think conceptually. I’ve used Lego Blocks, toothpicks and marshmallows, the chalkboard, and even a human pyramid/chain with good results.

**Resources**

Buehl, Doug. *Classroom Strategies for Interactive Learning.* Fourth ed. Newark, DE: International Reading Association, 2014. Print.

Burke, James. *Reading Reminders.* Plymouth, NH: Boynton/Cook Publishers. 2000. Print. (Also can be accessed at <http://www.readingrockets.org/article/103-things-do-beforeduringafter-reading>)

Hill, Hillary. *Ten Fun-filled Formative Assessment Ideas.* Accessed 4/20/16 at <http://www.edutopia.org/discussion/10-fun-filled-formative-assessment-ideas>

Visible Thinking. Accessed 4/23/16 at <http://www.visiblethinkingpz.org/VisibleThinking_html_files/03_ThinkingRoutines/03a_ThinkingRoutines.html>