

REFLECTIVE WRITING (RW) - Summary sheet

Prepared by: Chris Whittaker

What:

Reflective Writing (RW) is a way to get students to come to class prepared for a more meaningful engagement with the content/topic in a particular class.

Prior to class, students review some assigned material (readings, video, etc.) and submit a written reflection on the difficulties they encountered in the materials. The teacher reviews a sample of the writings and begins the class by reviewing the issues that arose from the writings and uses this to inform and shape the activities done in class.

Why:

In order to effectively engage students in meaningful, authentic and challenging classroom activities there needs to be recognition and activation of prior knowledge. That is, students need to have a basic familiarity with the topic and be aware of how it fits (or not) with what they already know, and both the students and teachers need to have a common language and understanding of difficulties students are having with the content.

A secondary benefit to doing RW is that it explicitly values the process of recognizing and struggling with the things students don't understand. Learning is about struggling with the things we *don't* understand and if all teachers ever do is penalize students for being wrong – like on a test or assignment - why would they take the risk of exposing their struggles to us?

How:

Students:

- See student instruction sheet.

Teachers:

- Create a word cloud by cutting and pasting RW content into www.wordle.net
- Create a review document by pasting the word cloud and a sample of the RW into Word/PowerPoint/Notebook
- Discuss review document at the beginning of class and use the discussion to select/modify/refine classroom activities.

References:

Kalman, Calvin S. (2011) Enhancing Students' Conceptual Understanding by Engaging Science Texts with Reflective Writing as a Hermeneutical Circle. *Science & Education*, 20 (2). pp. 159-172. ISSN 0926-7220.

Reading Assignments: Reflective Writing

Physics NYC, Fall 2015 - Prepared by: Chris Whittaker

In order to do well in this course you need to read the relevant sections of the text before you come to class. To encourage you to do this I will assign REFLECTIVE WRITING (RW) assignments. RW's will be assigned in class and they are due no later than 3 hours before the beginning class (unless specified otherwise).

REFLECTIVE WRITING (RW) Instructions¹

Reflective writing is a way of reflecting on something you have read by writing in *free-form*. By *free-form* I mean that you write whatever comes into your head without worrying about format, grammar or structure. Importantly, reflective writing is mostly about what you *don't* understand: you free-write about the things from the reading that you didn't understand or had trouble with. It is also about linking the reading to everyday life and to things you've learned previously.

The purpose of reflective writing is not to show what you know. It's an activity that helps you understand what you *don't* know and relate it to things you're familiar with. It should help you figure out what you're having trouble with and where you need to focus your efforts when studying and asking questions in class.

If you think you understand everything in your reading, then say so, but **try scratching below the surface** – you probably didn't understand *everything* on first read! Explore the reading in more detail.

Lastly, make sure you try to link what you've read about with everyday life and the things you've learned before. Does any of what you've read relate to things you see in everyday life? Does it relate to previous sections or other courses?

How to complete a reflective writing assignment:

1. Read the assigned section(s) of the book one or two sections at a time (two if they are short). During your reading:
 - use whatever techniques you usually use to understand what you are reading (underlining, highlighting, summarizing, re-reading etc.).
 - make a mental note of the things that you don't understand or that you need to have clarified.
2. When you have finished the section(s), log-on to First Class and find the conference/folder for assignment at hand. Open a new message and *free-write* about what you have read.
 - Type whatever comes into your mind about what you just read. Write about what it means and what you didn't understand. Try to figure it out by writing. Ramble.
 - Don't write too much – usually ¼ to ½ of a page will do per section.
 - Don't pay attention to sentence structure or grammar as you write but write neatly enough for me to read.
 - Never edit what you have written. Don't correct spelling mistakes.
 - If you say something that you realize is wrong, don't erase it, correct it with another sentence. **Never erase** – just keep going (see sample below).
 - If at any time you get stuck, do not stop writing, instead write a nonsense word over and over again until you get unstuck (for example: “science science science science”).

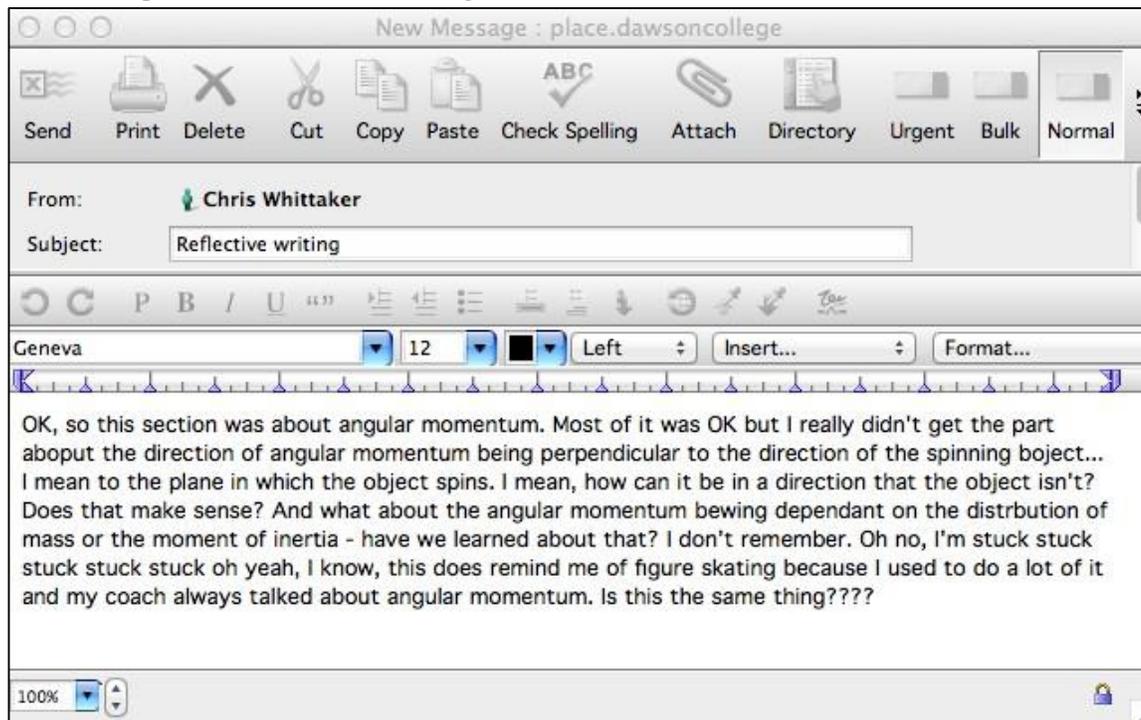
¹ These instructions are based on those used by Calvin Kalman at Concordia University (Dept. of Physics)

What reflective writing is NOT:

- Reflective writing is NOT essay writing. When you write an essay you structure your thoughts and arguments in a very precise way. When you do reflective writing you just blurt out what you're thinking on paper – it's not necessarily pretty.
- Reflective writing is not really about what you know – it's more about what you don't know or what you don't understand. I will never take marks off for mistakes or errors – that's what I'm trying to get you to flush out! I will only take off marks if you submit something other than a reflective writing piece (like a chapter summary).

An example of reflective writing:

Here's a sample of what reflective writing is:



A final note:

Reflective writing assignments are very different from what you are used to doing for a teacher. Usually you are trying to show me what you know and understand. In fact I usually take marks off for the things you don't understand.

With reflective writing I am doing the opposite. I am rewarding you for revealing to me what you don't know, don't understand, or that confuses you! The first step in learning is to identify the trouble spots. You can't begin to learn until you identify what it is that you don't understand.

Reflective writing is a tool to help you learn. Once you've identified what it is that you don't understand then you can work on fixing it. Most often the fixing comes after the reflective writing, although sometimes while you're writing you figure it out – that's OK too. Keep flushing it all out and go to a deeper level. If you figure out one thing then reflect on a deeper question that you don't get.

Remember:

- **Do your RW assignment on FirstClass in the proper conference/folder**
- **Submit you RW no later than 3 hours before class.**

How to get your students to read before coming to class

Why should students read the material?

- We want to familiarize students with the topic
- We want to cut down on what we need to cover during the lecture
- We want them to be ready for a discussion
- We want them to be able to manipulate the knowledge

But why don't students read the material?

- The material is **unfamiliar** and students lack context for it
- The material is **too abstract** too soon, not concrete enough
- Students find it **difficult to know what is important and what is not (!)**. Prioritizing and organizing ideas is a cognitively complex task – one of the most difficult ones!
- Students **don't feel that professors use the texts**, or they notice that professors cover the same material during the lecture, so they find it redundant

How can we help?

- Do not assume students know why you want them to read the material or what is the best strategy to approach an unfamiliar text
- Teach strategies for reading textbooks: paying attention to learning outcomes, headings, and questions at the end
- Provide guiding study questions referring back to the text: start with familiar, concrete questions or examples, and with knowledge and understanding questions before moving on to application, analysis, synthesis, evaluation or creative questions.
- Connect your lectures to the assigned texts better by making the links between them explicit (provide sequences or hierarchies to give context)
- At the beginning of the lecture, make sure to base your essential questions for the lecture on the study questions for the assigned text
- Make lecture wrap-ups not just for summarizing, but also for introducing new material and discussing the next reading task
- Do not penalize students with “surprise” quizzes; if you quiz them on the reading, reuse the study questions
- Refer students with difficulties to the Academic Skills Centre

Combining Flipped Classroom and (Collaborative) Active Learning

Course	Flipped Class	Active learning Class
Advanced Microsoft Office	Video demonstration with data files	Sample solution with more data files
Taxation	Video Class and online homework problems	Collaborative active learning solving problems on smart boards

Reasons for Success

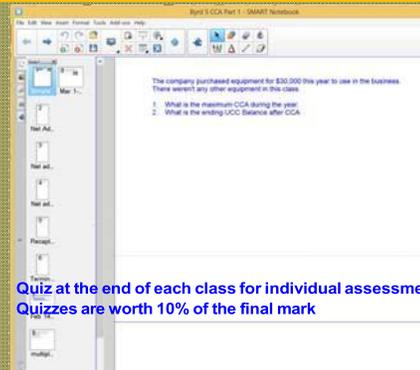
Learning culture

- 1 Shift from teacher-centered to student-centered
 - Students control timing and pace of course
 - Videos and Homework are available anytime and anywhere
 - Students can pause and repeat, review without feeling embarrassed
- 2 Videos support learning but are not central to it or drive it
- 3 Homework is worth 10% of final mark
- 4 Instant gratification – Online homework gives instant feedback
- 5 They can do homework unlimited times for practice

Teacher's Role in class

- 1 Provide instant feedback and assess student work.
- 2 Provide deeper explanations
- 3 Teachers still have a place to be more effective after students have explored the subject on their own by watching the video and doing the closely associated online homework

Collaborative Active Learning class



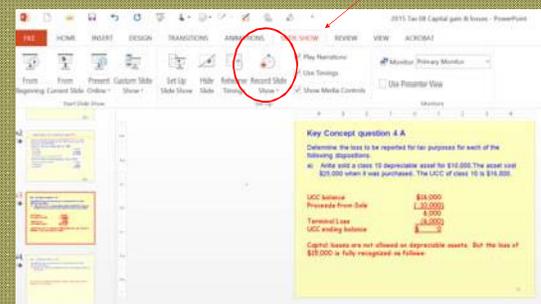
Quiz at the end of each class for individual assessment
Quizzes are worth 10% of the final mark

Khan in 2011



Creating the videos

Add Audio to Powerpoints



Example— Short year con't

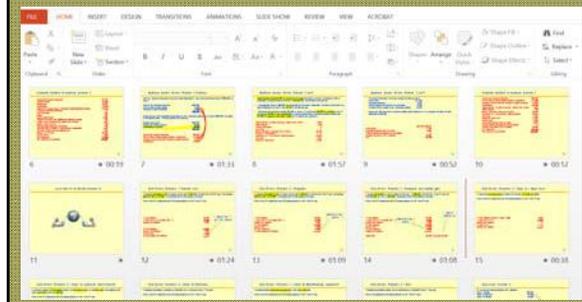
Jane is a self-employed and started her business on July 1, her tax year end is Dec 31. On July 1, she purchased a car for \$32,000. The car loan interest from July 1- Dec 31 was \$1,960.

Calculate the maximum CCA that she can deduct in 2016, assuming that business km and total km driven is constant (12,000/15,000) and that her car is sold in 2016 for \$21,000 and replaced with a new car costing \$34,000.

2015 Car (class 10.1) (max \$30,000)	30,000
Less CCA $\$30,000 \times 30\% \times \frac{1}{2} \times \frac{1}{2}$	(2,250)
2015 UCC ending balance	27,750
2016 CCA $\$27,750 \times 30\% \times \frac{1}{2} \times \frac{12}{15}$	3,330 old car
2016 new Car CCA $\$30,000 \times 30\% \times \frac{1}{2} \times \frac{12}{15}$	3,600 new car
Total CCA deduction	6,930



Editing Video



Good time to do Online homework

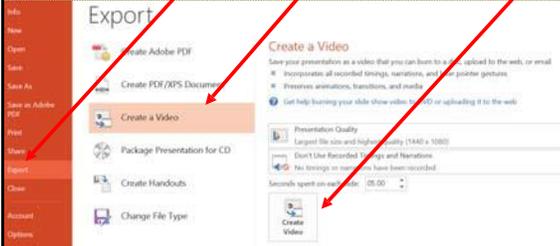
Ex 8-2 Identical Properties



Create Video



Create Video



Put link on Moodle



Western Civilization Reading Quizzes

Administered at the opening of class.

Here are a series of quizzes I have used in Western Civilization that ask students to respond to readings in a variety of ways. They ask for a range of responses, but all of them are delivered at the beginning of class with limited amount of time allotted to their completion. I usually know who is doing the reading, so I usually allow enough time for those students to finish before collecting the assignments. More recently, students have been writing these responses in booklets that I only collect at various points in the semester, thus concentrating my marking time.

Quiz # 1 – From *The Republic* – Short Answers

WESTERN CIVILIZATION

- 1) The Reading we did was called “The Allegory of the _____”
- 2) Which of the following elements of society are discussed in this allegory?
 - (a) The role of the farmer
 - (b) The purpose of education
 - (c) The nature of true leadership
 - (d) Water
- 3) Who is speaking in the text? _____
- 4) Who wrote the text? _____

Quiz # 2 – The Rise of Islam – Free-Writing Exercise

WESTERN CIVILIZATION

1. Islam appeared in approximately what century:
a/ 200 b.c.e. b/ 100 c.e. c/ 400 c.e. d/ 600 c.e.
2. Which of the following are examples of jihad?
 - i. Defense and expansion of the Muslim community
 - ii. Forced conversion of all non-Muslims
 - iii. Self-improvement in one’s personal life

Free Write

Using the remaining space to reflect upon what have been the most interesting aspects of the course material so far, *from your perspective*. You may answer this question any way you would like, **but you must fill the space**. Say what you think about any of the following topics: the assigned readings, the types of historical examination (social, artistic, religious, economic, political) and which of them interest you most.

Questions you might consider:

- What kind of history interests you most, and why?
- What did you think of reading Plato's *The Symposium* in class?
- What does the Agora tell us about Athenian society in the age of Pericles?
- What kind of parallels might you draw between the lives of Socrates, Jesus and Mohammed?

This is an exercise in **free-writing**. Free-writing often precedes academic writing and can look like a journal, a letter, an email etc. It is informal in tone, but focused in content. You might think of this exercise as a reflection upon your learning so far in this class; this may lead you to focus your note-taking in preparation for the mid-term exam. You may ramble, this is fine. You need not answer all or even any of the questions, as long as your reflection is upon the content of the course thus far. If you have nothing to say, write "Thinking, thinking, thinking." Write the phrase over and over until you think of something to say, or else fill the page with repetitions of that phrase.

Rules of free-writing:

- Do not stop
- Don't edit
- Your pen should not leave the page
- Do not double space

Paragraph Quiz – Marx and Owen, Communism and Socialism

WESTERN CIVILIZATION

Name _____

Date _____

Content: + ✓ - / 3	Form: /2	/5
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Write a paragraph using evidence from Karl Marx's *Communist Manifesto* and Robert Owen's *A New View of Society*. Identify one point of comparison and prove it using a quote from each. Your paragraph must have a topic sentence, concluding sentence and one example from each source. You may use both your notes and the text. Quotations from the source should replicate the following format:

Introductory statement, "[insert quotation here]," (Marx 227). Please note the position of the **comma** and **period**. When referring to the texts, use last names only. Use no more space than that provided below.