Essays:
A special case of performance based assessment
Characteristics of Essay questions

- Requires students to produce the answer
- Answer may vary between one word and several pages
- Usually are of two types (more likely two ends of a continuum)
- Note: even though we use the word “essay”, it applies to math (e.g., grading the process by which students came up with an answer)
Specific complex learning outcomes measured by Essay questions

- Restricted-response
  - Cause-and-effect relationships
  - Applications of principles
  - Presenting relevant arguments
  - Formulating tenable hypotheses
  - Formulate valid conclusions
  - Stating assumptions
  - Describing limitations of data
  - Explaining methods and procedures
Specific complex learning outcomes measured by Essay questions

- Extended response
  - Produce, organize, and express ideas
  - Integrated learnings in different areas
  - Create original forms
  - Summarizing
  - Construct creative stories
  - Explain concepts or principles
  - Persuading a reader
  - Evaluating possible outcomes (popular with older children)
Essay questions

- Freedom of response on the part of the student
- Allows students to
  - Pick the information that want to include
  - How to organize the information
  - How these want to express these ideas (words, sentences)
Essay questions

- How are these questions different from select-type?
  - Best used to measure ability to organize, integrate, express ideas
  - Easier to construct than select-type
  - More difficult to grade (subjective, less reliable)
  - Vulnerable to the effects of bluffing, writing ability
  - Samples inadequately (fewer items can be asked)
  - It can be very motivating for students who are good at organizing, expressing, and integrating ideas (bad for those who lack writing ability)
Types of Essay questions

- Restricted-response
  - Specific, precise response. Boundaries of response are clear – use words like list, define, explain
  - Better for specific learning outcomes (e.g. describe, explain)
  - Clear-cut, easier to prepare
  - Easier to grade (can even use a model answer to grade)
  - Great for understanding, application, and analysis level questions

For example,
- what nutrients do plants require to grow?
- Define each part of speech: noun, verb, adjective, adverb
Types of Essay questions

- Extended response
  - Considerable freedom in determining the form and scope of answers (no ONE correct answer).
  - Better for global learning outcomes
  - Few restrictions (except for page limits)
  - Best for assessing originality evaluation, synthesis (create)
  - Allows for considerable creativity
  - Difficult to grade, requires a lot of judgment (vulnerable to effects of subjectivity)

For example,
- Give two examples of unfair wars in the 1900s. Explain why each of these is unfair.
Rules for developing essay questions

1. Restrict the use of essay questions to those learning outcomes that cannot be measured satisfactorily by objective items (e.g., understanding, analysis, creating) – otherwise it’s too much effort for learning outcomes like knowledge. Use extended response only for higher levels (create, evaluate).

2. Construct questions that will call forth the skills specified in the learning outcomes. If using restricted response essay, make sure the verbs of the learning outcome match the verbs of the question. When using extended response, make sure that the evaluation criteria assess the learning outcome(s).
Rules for developing essay questions

3. Phrase questions so that they present a clear task to be performed. Use terms like explain, describe, compare, give advantages & disadvantages. Sometimes, students may not know the meaning of terms like apply. If you are looking for a certain number of reasons or factors (or whatever), indicate the number in the question, like “what were two major factors that contributed to civil war?” It is best to create a model answer or scoring criteria before administering the test. This will make the task clearer.
4. Do not permit a choice of questions unless the learning outcome permits it.

The ability of these types of questions to sample the material is limited. Giving choices means that you are further limiting assessment of all learning outcomes. Students also do not necessarily know which questions they may be able to answer best. Some students are more motivated by a challenge than others are.

Giving options with extended response may be justified, especially if the topic is irrelevant and the criteria for judging the essays remain the same.
Rules for developing essay questions

5. Provide ample time for answering and suggest a time limit on each question.
   - Allow time for thinking as well as writing
   - If there are a lot of questions to be asked, then use more frequent testing. Do not include too many essay items in one test (this is determined by the age of the student)
   - Indicate page limits, if possible
Rules for grading essay questions

- What biases us in grading essays?
  - Spelling
  - Writing style
  - Our knowledge of a student
  - Type of examples used
  - Handwriting

- How do we reduce the effect of such biases?
Rules for grading essay questions

1. Evaluate answers to essay questions in terms of learning outcomes to be measured. For example, if the learning outcome is “student will create a time line or calendar” (1st grade), then you should grade for the time line alone! Not any descriptions, extraneous material that is included. This score, then, represents only the learning outcome! You may give a separate score for spelling & grammar, if appropriate.
Rules for grading essay questions

2. Score restricted response answers by the point method, using a model answer as a guide. For example, if the student has to list 2 reasons why the civil war took place, then write out all the possible reasons, and assign points to the (a) reasons; and (b) explanations. The number of points you assign to each depends on the learning outcome(s) assessed.
Rules for grading essay questions

3. Grade extended-response answers by the rating method, using defined criteria as guide. These criteria should come directly from the learning objectives/outcome. Each criterion could be rated on a scale of 1 to 5 (with 5 being the highest grade). Examples are: punctuation, subject-verb agreement, capitalization, spelling, organization, vocabulary, etc. Use only these criteria that are important and are taught!!
Rules for grading essay questions

4. Evaluate all the answers to one question before proceeding to the next question.
   1. Reduces bias (halo effect from previous answers)
   2. Keeps your standards consistently applied
   3. Let effort

5. Evaluate answers to essay questions without knowing the identity of the writer
   This controls for personal bias
   Use numbers, pseudonyms, have students type up their answers (so you do not recognize them by handwriting, etc.)
Rules for grading essay questions

6. Whenever important decisions are being made, have two or more persons grade one answer.

This serves as a check for objectivity. You may need to do this occasionally – or with specific students.

Where can you find another grader? A member of your cluster/team.

Use this approach more thoroughly if awards, placement in special programs are done on the basis of these grades. May even want to think about averaging out ratings of 2 or more people (just like the Olympics ratings).