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Student seminar series 1 (SSS1): Manuscript reviewing for a paper collection

Summary:

You are invited to be a reviewer for a new, book-length paper collection. The collection is about influential systems and their methods, and is meant to be a reading text for an undergraduate course. Our class will review several of previously-published papers about the "core systems" to decide whether any of them should be included. These papers have, according to peer reviewers, already met the standard of work required for publication and have been published in journals or conference proceedings. Now we are asking a **different question** and assessing both the material, and how well these papers communicate about their topic area and methods to readers who have some knowledge of the area, but are non-experts.

Each paper will have its own small group of reviewers. Everyone will read their group's paper and make some notes for a short individual review, assessing the characteristics of the paper (there are some questions on page 2 to help you get started). Each group will then convene and discuss their individual reviews (within the group) to see where they agree and disagree. They will need to produce a short "meta-review" based on all the individual reviewer comments, with an overall decision about the paper. They will present the paper content and their review to the class.

Goals with respect to the course:

- A Discuss what it means to review an individual paper, and to scale that up to a review of the literature (and why we would want to do that in this field).
- A Begin going into more depth about the "core systems" and provide an introduction to the more detailed "topic units" (e.g. metacognition, tutorial dialogue, etc.)
- Learn how peer review of conference/journal papers works. This is a key part of the scientific process, and not necessarily discussed in other courses.

The "what's in it for you?" factor:

- A chance to practice reviewing (helped by your classmates) before doing Assignment 1, which is a small-scale literature review (3-5 papers): note the purposes of the seminar and assignment reviews may differ.
- ▲ Getting ahead on the reading you will need to do for Assignment 1. The papers reviewed in the seminars are "starter papers" for the assignment—I even tell you which papers go with which question.
- A chance to receive formative feedback on the review (see below), to help avoid big mistakes on Assignment 1.

Feedback you will receive:

Short formative feedback on your group's meta-review (see instructions) and on your individual review, should you choose to turn one in. This will focus on whether or not your group has gone beyond summary, and has succeeded in **analysing and evaluating** the paper.

Individual and group instructions:

Individually:

- 1. Individually read the paper you are reviewing. Please do not discuss it with your group yet, unless you feel that you really do not understand the work.
- 2. Write your individual review (probably one half to one page), considering the "starter questions" on page 2. In order to do this, you will likely need to read parts of the paper

again, and may also need to look at other papers for background information.

With your group:

3. Discuss the paper and set of individual reviews. Agree on the contents of the "meta-review" and agree on an overall decision about the paper. Possible decisions cover a range:

Accept (definitely a good paper for communicating to non-experts),

Weak accept,

Neutral (neither good nor bad),

Weak reject,

Reject (dreadful paper for communicating to non-experts).

- 4. Write the Meta-review. This can be as simple as bullet points about the basis for the overall decision, with reference to where specific reviewers agreed or disagreed. It does not need to restate all the content from the individual reviews.
- 5. Prepare a presentation with 1 slide each for:
 - 1. Information on key paper content. You can use additional slides for images ONLY.
 - 2. Your overall decision (accept/reject) and key points about this
 - 3. (Optional) Any comments to the paper authors on what you think was done especially well, or what needs improvement.

On presentation day:

- 6. When your group presents to the class, make sure to explain enough about the piece of work that we can understand your comments or criticisms. However, you are encouraged to spend more time on your *review of the paper* (why you evaluated it the way you did).
- 7. Turn in your group's individual reviews, meta-reviews, and slides in order to receive formative feedback.

Feedback will be on a group basis, based on the meta-review. I am asking for the individual reviews as well so that it is clear who has participated and who has not, and also because the meta-review will not make much sense without them.

Slides and meta-reviews will be posted to the course web page.

"Starter questions" to help you write your individual review:

You do not need to answer these item-by-item in the review, and do not have space to do so. They are meant to help you start thinking about the paper, if you are not sure where to start.

- 1. Did the authors present evidence that the subject addressed in the paper is worthy of being studied? What type of evidence was it?
- 2. Did the authors clearly state one or more research questions?
- 3. Did the authors choose methods that could help answer their research questions? Do they offer evidence/explanation for their choice of methods, and does this make sense to you (the non-expert reader)?
- 4. Are the authors' conclusions about their study supported by the data they present? If you are not sure, what type of information might help you to make that judgement?
- 5. Do the authors explain the implications of the work, for the narrow subject area and the larger field? Do these convince you?
- 6. Are there parts of the paper that you feel you did not understand? If YES, what (if anything) might the authors have done to avoid this? (e.g. provide more information about X, include an image, etc...)
- 7. Are there parts of the paper that you thought were particularly clear or convincing? What made these parts good?