Peer Review – Dos and Don'ts Marc Los Huertos March 3, 2019

Rationale

. . .

# Learning Objectives

This assignment is based on the EA learning outcome for writing and communicating:

- Understand the real-world processes and implications of environmental problem-solving and decision making.
- Speak and write clearly and persuasively.

## What is the Peer Review Process?

Peer review is the evaluation of work by one or more people of similar competence to the producers of the work (peers). It constitutes a form of self-regulation by qualified members of a profession within the relevant field. Peer review methods are employed to maintain standards of quality, improve performance, and provide credibility. In academia, scholarly peer review is often used to determine an academic paper's suitability for publication. Peer review can be categorized by the type of activity and by the field or profession in which the activity occurs, e.g., medical peer review.

## Characteristics Effective Peer Reviewing

- 1. The first one is fairness and politeness. Good referees always maintain a positive and constructive tone and never make personal remarks about the authors, even if the work is not good.
- 2. The second point is thoroughness and clarity. Authors and editors expect reviewers to give helpful feedback and provide concrete examples and advice on how the work can be improved. Here are a few other things you should keep in mind when writing and submitting a review:
  - When writing up the results, always be friendly and constructive while remaining critical and attentive. Make sure that
    the results are technically sound and the claims sufficiently

- supported by the presented data. You should also assess the strengths and importance of the work and give clear recommendations on how it can be improved.
- You should check, whether the title and the abstract (if present)
  describe the work properly, whether the methods section provides enough details for a reader to repeat the experiments, and
  whether the results and discussion are presented in a detailed,
  logical, and understandable way. They should also check and
  report any possible ethical issues.
- A good way to organize your review is by starting with a summary of the paper, where you shortly describe what the author(s) did. Then you can include some general comments about the work, for example, some thoughts about the novelty of the findings, or the way the data is presented, and finally, you can provide a specific list describing the points that can be improved and how it can be done so. It is important to number your remarks, so that the authors can respond to them easily.
- The final step is to upload your report into the journal' to Sakai.
   Be sure you use the form and your ID yourself using the assigned random number.

# Types of Peer Reviews

Criticize: ...
Persuade: ...
Praise: ...

Steps to Review Peer

## Peer Review Assignments

```
"38360",
              "Heather A. Thams",
              "Chelsea D. Neill",
              "Kyle O. Olejniczak",
              "Ashley M. Quackenbush",
              "Michael W. Esgro",
              "Sarah E. Finstad",
              "Jessica Missaghian",
              "John F. Inman")
# Doesn't like this for some reason...
roster = read.csv("/home/CAMPUS/mwl04747/github/Climate_Change_Narratives/Admin/EA30SP19Roster.csv")$Stu
length(roster)
## [1] 15
sampler <- function(author) {</pre>
  reviewer <- sample(author)</pre>
  reviewer
  }
sampler(roster);
## [1] Meyer, Ella K.
                                Budd, Susannah
## [3] Generous, Claire
                                Lai, Bailey
## [5] Wong, Kylie
                                Yi, Claire
## [7] Clark, Chris
                                Kaufman, Eve Alexandra
## [9] Vance, Cheyenne
                                Anderson, Toni Thayer
## [11] Kuhn, Emily C.
                                Lane, Ximena
## [13] Bullock Floyd, Makeda
                                Randle, Jasmine
## [15] Namachivayam, Siddharth
## 15 Levels: Anderson, Toni Thayer Budd, Susannah ... Yi, Claire
set.seed(123)
repeats <- c(1,2,3)
while(sum(repeats)>0) {
Reviewer1=sampler(roster); Reviewer1
Reviewer2=sampler(roster); Reviewer2
Reviewer3=sampler(roster); Reviewer3
```

for(i in 1:length(roster)) {

```
repeats[i] = sum(roster[i]==Reviewer1[i], roster[i]==Reviewer2[i], roster[i]==Reviewer3[i],
Reviewer1[i]==Reviewer2[i], Reviewer1[i]==Reviewer3[i], Reviewer2[i]==Reviewer3[i])
}
repeats
}
rndnumbers = sample(1000:9999,length(roster)*3);rndnumbers
## [1] 2294 2679 5742 5495 4315 9850 3798 4901 9468 4102 3849 5381 4381 3844
## [15] 6395 2790 9062 4733 3068 5867 2410 1058 5432 5010 8597 8949 9544 5504
## [29] 3871 4072 9311 2157 9735 3529 4607 8279 4144 1871 1733 2447 7404 7965
## [43] 1323 1213 7355
ThreeReviewer <- data.frame(Author=roster, Reviewer1name=Reviewer1, Reviewer2name=Reviewer2,
Reviewer3name=Reviewer3, Repeated=repeats, Reviewer1=rndnumbers[1:length(roster)],
Reviewer2=rndnumbers[c(length(roster)+1):c(length(roster)*2)],
Reviewer3=rndnumbers[c(length(roster)*2+1):c(length(roster)*3)]); ThreeReviewer
##
                       Author
                                         Reviewer1name
                                                                  Reviewer2name
## 1
        Anderson, Toni Thayer
                                           Wong, Kylie
                                                                     Yi, Claire
## 2
               Budd, Susannah
                                 Bullock Floyd, Makeda
                                                               Randle, Jasmine
## 3
        Bullock Floyd, Makeda
                                Anderson, Toni Thayer
                                                                Kuhn, Emily C.
                 Clark, Chris Kaufman, Eve Alexandra
                                                              Generous, Claire
## 4
## 5
             Generous, Claire
                                       Randle, Jasmine
                                                                   Lane, Ximena
       Kaufman, Eve Alexandra
                                        Meyer, Ella K.
                                                         Anderson, Toni Thayer
## 6
## 7
               Kuhn, Emily C.
                                           Lai, Bailey
                                                                    Wong, Kylie
## 8
                  Lai, Bailey
                                      Generous, Claire
                                                                Meyer, Ella K.
## 9
                 Lane, Ximena
                                          Clark, Chris
                                                               Vance, Cheyenne
               Meyer, Ella K.
                                        Budd, Susannah
                                                                    Lai, Bailey
## 10
## 11 Namachivayam, Siddharth
                                            Yi, Claire
                                                        Kaufman, Eve Alexandra
              Randle, Jasmine
                                          Lane, Ximena
                                                                   Clark, Chris
## 12
## 13
              Vance, Cheyenne
                                        Kuhn, Emily C. Namachivayam, Siddharth
## 14
                  Wong, Kylie Namachivayam, Siddharth
                                                         Bullock Floyd, Makeda
## 15
                   Yi, Claire
                                       Vance, Cheyenne
                                                                 Budd, Susannah
##
                Reviewer3name Repeated Reviewer1 Reviewer2 Reviewer3
## 1
               Budd, Susannah
                                      0
                                             2294
                                                       2790
                                                                  9311
## 2
                  Wong, Kylie
                                      0
                                             2679
                                                       9062
                                                                  2157
## 3
               Meyer, Ella K.
                                      0
                                             5742
                                                       4733
                                                                  9735
## 4
                   Yi, Claire
                                      0
                                             5495
                                                       3068
                                                                  3529
## 5
       Kaufman, Eve Alexandra
                                      0
                                             4315
                                                       5867
                                                                  4607
## 6
                 Lane, Ximena
                                      0
                                             9850
                                                       2410
                                                                  8279
## 7
              Randle, Jasmine
                                      0
                                             3798
                                                       1058
                                                                  4144
## 8
                 Clark, Chris
                                      0
                                             4901
                                                       5432
                                                                  1871
## 9
      Namachivayam, Siddharth
                                      0
                                             9468
                                                       5010
                                                                  1733
```

```
## 10
                Kuhn, Emily C.
                                        0
                                                4102
                                                           8597
                                                                      2447
## 11
              Generous, Claire
                                                                      7404
                                        0
                                                3849
                                                           8949
        Anderson, Toni Thayer
## 12
                                        0
                                                5381
                                                           9544
                                                                      7965
## 13
        Bullock Floyd, Makeda
                                        0
                                                4381
                                                           5504
                                                                      1323
## 14
               Vance, Cheyenne
                                        0
                                                3844
                                                           3871
                                                                      1213
## 15
                   Lai, Bailey
                                        0
                                                6395
                                                           4072
                                                                      7355
```

Review1 <- data.frame(Name= ThreeReviewer\$Reviewer1name, Random1=ThreeReviewer\$Reviewer1); Review1

```
##
                          Name Random1
## 1
                  Wong, Kylie
                                  2294
## 2
        Bullock Floyd, Makeda
                                  2679
        Anderson, Toni Thayer
## 3
                                  5742
## 4
       Kaufman, Eve Alexandra
                                  5495
## 5
              Randle, Jasmine
                                  4315
               Meyer, Ella K.
## 6
                                  9850
## 7
                  Lai, Bailey
                                  3798
## 8
             Generous, Claire
                                  4901
                 Clark, Chris
## 9
                                  9468
## 10
               Budd, Susannah
                                  4102
## 11
                   Yi, Claire
                                  3849
## 12
                 Lane, Ximena
                                  5381
## 13
               Kuhn, Emily C.
                                  4381
## 14 Namachivayam, Siddharth
                                  3844
## 15
              Vance, Cheyenne
                                  6395
```

Review2 <- data.frame(Name= ThreeReviewer\$Reviewer2name, Random2=ThreeReviewer\$Reviewer2); Review2

```
Name Random2
##
## 1
                   Yi, Claire
                                  2790
## 2
              Randle, Jasmine
                                  9062
## 3
               Kuhn, Emily C.
                                  4733
## 4
             Generous, Claire
                                  3068
## 5
                 Lane, Ximena
                                  5867
## 6
        Anderson, Toni Thayer
                                  2410
## 7
                  Wong, Kylie
                                  1058
## 8
               Meyer, Ella K.
                                  5432
## 9
              Vance, Cheyenne
                                  5010
## 10
                   Lai, Bailey
                                  8597
       Kaufman, Eve Alexandra
## 11
                                  8949
## 12
                 Clark, Chris
                                  9544
## 13 Namachivayam, Siddharth
                                  5504
## 14
        Bullock Floyd, Makeda
                                  3871
## 15
               Budd, Susannah
                                  4072
```

Review3 <- data.frame(Name= ThreeReviewer\$Reviewer3name, Random3=ThreeReviewer\$Reviewer3); Review3

```
##
                          Name Random3
## 1
               Budd, Susannah
                                  9311
## 2
                  Wong, Kylie
                                  2157
               Meyer, Ella K.
## 3
                                  9735
## 4
                   Yi, Claire
                                  3529
## 5
       Kaufman, Eve Alexandra
                                  4607
## 6
                 Lane, Ximena
                                  8279
## 7
              Randle, Jasmine
                                  4144
## 8
                 Clark, Chris
                                  1871
## 9
      Namachivayam, Siddharth
                                  1733
               Kuhn, Emily C.
## 10
                                  2447
## 11
             Generous, Claire
                                  7404
## 12
        Anderson, Toni Thayer
                                  7965
## 13
        Bullock Floyd, Makeda
                                  1323
## 14
              Vance, Cheyenne
                                  1213
## 15
                  Lai, Bailey
                                  7355
combined <- merge(Review1, Review2, by.x="Name")</pre>
combined <- merge(combined, Review3, by.x="Name"); combined</pre>
                          Name Random1 Random2 Random3
##
## 1
        Anderson, Toni Thayer
                                  5742
                                           2410
                                                   7965
## 2
               Budd, Susannah
                                           4072
                                  4102
                                                   9311
## 3
        Bullock Floyd, Makeda
                                  2679
                                           3871
                                                   1323
## 4
                 Clark, Chris
                                  9468
                                           9544
                                                   1871
## 5
             Generous, Claire
                                  4901
                                           3068
                                                   7404
       Kaufman, Eve Alexandra
## 6
                                  5495
                                           8949
                                                   4607
## 7
               Kuhn, Emily C.
                                           4733
                                                   2447
                                  4381
## 8
                  Lai, Bailey
                                  3798
                                           8597
                                                   7355
## 9
                 Lane, Ximena
                                                   8279
                                  5381
                                           5867
## 10
               Meyer, Ella K.
                                  9850
                                           5432
                                                   9735
## 11 Namachivayam, Siddharth
                                  3844
                                           5504
                                                   1733
## 12
              Randle, Jasmine
                                  4315
                                           9062
                                                   4144
## 13
              Vance, Cheyenne
                                  6395
                                           5010
                                                   1213
## 14
                  Wong, Kylie
                                  2294
                                           1058
                                                   2157
## 15
                   Yi, Claire
                                  3849
                                           2790
                                                   3529
```

write.csv(ThreeReviewer[,c(1,6:8)], file = "/home/CAMPUS/mwl04747/github/Climate\_Change\_Narratives/Admin write.csv(combined, file = "/home/CAMPUS/mwl04747/github/Climate\_Change\_Narratives/Admin/PeerReviewedAss

-	Author	Reviewer1	Reviewer2	Reviewer3
1	Anderson, Toni Thayer	2294	2790	9311
2	Budd, Susannah	2679	9062	2157
3	Bullock Floyd, Makeda	5742	4733	9735
4	Clark, Chris	5495	3068	3529
5	Generous, Claire	4315	5867	4607
6	Kaufman, Eve Alexandra	9850	2410	8279
7	Kuhn, Emily C.	3798	1058	4144
8	Lai, Bailey	4901	5432	1871
9	Lane, Ximena	9468	5010	1733
10	Meyer, Ella K.	4102	8597	2447
11	Namachivayam, Siddharth	3849	8949	7404
12	Randle, Jasmine	5381	9544	7965
13	Vance, Cheyenne	4381	5504	1323
14	Wong, Kylie	3844	3871	1213
15	Yi, Claire	6395	4072	7355

#### Instructions

Please review 3 student blogs based on the assigned random numbers that you will recieved by email.

Begin by providing a summary of the paper, where you shortly describe what the author(s) did. Then you can include some general comments about the work, for example, some thoughts about the novelty of the findings, or the way the data is presented, and finally, you can provide a specific list describing the points that can be improved and how it can be done so. It is important to number your remarks, so that the authors can respond to them easily.

Determine if the author states the question(s) and their objective. Determine how the hypotheses are linked to the question(s) being ask. Then evaluate if the data were analyzed clearly (hypothesis, statistical tests). Determine if the peer reviewed literature was used to support the text and and if the conclusions were clear. Be sure to make concrete suggestions about how the blog could be improved. Finally, between 1 (best) and 3 (weakest), rank each blog on the following criteria:

- Grammar and Style
- Graphics
- Rational
- Methods
- Conclusions

• Citation (format and effectiveness) (Use CSE format handout to check on style/formatting).

Use the provided form for the peer review.