Preparing Journal Reviewers: 
Mentoring Doctoral Students 
as Peer Reviewers

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Purpose

- Identify trends in the scholarly debate about peer review
- Make a case for purposeful peer review preparation
- Describe Project Review – a mentoring program to prepare doctoral students for the journal review process
Traditional Peer Review

- Double-blind
- Editor selects reviewers from a pool of experts
- Reviewers critique all aspects of manuscripts:
  - Literature review
  - Method
  - Design
  - Results
  - Conclusions
- Reviewers make publication recommendations
Functions of Peer Review

- Control of scholarly reporting
- Feedback to authors
- Dissemination of new findings
- Canonization of knowledge (when replication studies get reviewed and approved)

On a more pragmatic note, reviewers…
- Indirectly affect promotion and tenure of authors
- Enhance the ‘service’ section of their vitas
Possible Concerns

- Reviewers’ bias
- ‘Gate-keeping’
- Length of time between submission and publication
- ‘Forced’ revisions
- Often there is a lack of true dialogue between reviewers and authors
Possible Alternatives?

• Introduce more openness to the process
  ➢ Reviewers know the author
  ➢ The author knows reviewers
  ➢ The author selects his/her own reviewers (e.g., Biology Direct)

• Expand the pool of reviewers – e.g., manuscript is put on the journal site for everyone to critique

• Change the timeline – e.g., article continues to be critiqued on a forum after it has been published
Numerically speaking...

- There are more scholarly journals today than ever before, perhaps leading to fewer reviewers per publication

- About 5,000 titles in the field of education

- Retirement of scholars, combined with insufficient graduation of replacements in some fields, negatively affects the pool of reviewers
In a survey of 90 special education faculty in colleges and universities, 78% did not receive any formal training in peer review.

Only 40% of respondents had informal mentoring during graduate school.

Most respondents (72.8%) expressed that peer review training should be a part of graduate coursework (Dukes & McLaughlin, 2014).
Project Review

• Collaborative effort between Florida Atlantic University and editors of *Teacher Education and Special Education* (CEC: Teacher Education Division)

• An explicit system of professional development to mentor doctoral students to review manuscripts and write scholarly reviews
Direct and Explicit Instruction of Scholarly Reviewing

- Project Review increases students’ opportunity to review
- Project Review includes a training manual for reviewers
- Doctoral students participate in reviewer training exercises
- Doctoral students work with faculty mentors, who provide supervision and feedback
Project Review as Professional Development

- Manuscript reviewing as a learned behavior
- The skills are developed through explicit instruction and mentoring
- Orientation and training module
- Guided practice and rehearsal with journal vignettes
- Additional training in doctoral seminar (core class in the program)
- Faculty mentors guide reviews and provide feedback prior to submission
1. Journal editor sends a manuscript to a faculty reviewer

2. Faculty reviewer receives a manuscript for review

3. Faculty reviewer selects and invites a doctoral student to be a co-reviewer

4. Doctoral student accepts the invitation to participate in peer review

5. Faculty mentor and student agree on the timeline, process, and level of assistance.

6. Faculty mentor and student collaborate on the actual review

7. Faculty mentor sends the final review to the journal editor
A Match between the Student and the Manuscript

- What is the student’s area of study/expertise?
- Does the students have enough background on the topic to review a given manuscript?
- Does the student understand the methodology and the analysis?
- Does the student have enough time to devote to the review?
- Can the student meet the deadline?
Evaluating Project Review

- Reviewer development and evaluation
  - Doctoral students evaluate their own:
    - Skill development
    - Preparation to serve as reviewers
  - Faculty mentors evaluate doctoral students’:
    - Reviews prior to submitting them
    - Growth and development of their reviewing skills
    - Preparedness to serve as journal reviewers
Evaluating Project Review

- Annual report to *TESE*
- Number of reviews submitted to *TESE*
- Number of students serving as reviewers
- Mentor satisfaction with doctoral reviewers
- Student satisfaction with their own reviews
- The utility of Project Review
Data Available to Date

- 17 manuscripts reviewed and submitted to *TESE*
- 10 doctoral student reviewers have participated
- 8 faculty mentors
- FAU recognized by *TESE* editors and editorial board
What We Don’t Know?

• When do students believe they are ready to review independently?

• How many examples and types of manuscripts (e.g., position papers, quantitative studies, qualitative studies) does the student need to practice with before he/she is ready?

• How do we assess that it is time to stop preparing students and encourage them to review independently?
Conclusion

- For the past 300 years, the peer review process has been defined and refined to provide an acceptable level of objectivity about new knowledge. At the same time, it still remains “inherently a human process, subject to the imperfections of human behavior” (Rowland, 2002).

- The purpose of Project Review is, in part, to educate doctoral students about this ‘human process’, while helping them recognize and reduce their own ‘imperfections’ that could negatively influence the objectivity of their reviews.
References


