“Production Checks”: Backlog and Turnaround Times
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ASCE Journals Overview

- 34 journals with the same workflow
- 300 journal papers/month
- 5 in-house Production Editors (PEs) do “production checks” on every paper
  - This is on top of many other duties
- How to treat all journals equally?
  - First in, first out—across all journals
Production Checks

- Crucial part of production process
- After acceptance but before copyediting
- Check for anything that must go back to author:
  - Permission issues
  - Figure quality
  - Math compatibility
  - Command of English language
  - Etc.
- Problems:
  - Too many papers in the pipeline
  - Long turnaround times

Data Collection

- Since 2016
- Automated weekly report from production tracking software provides data, which we then input into our own report
- Backlog:
  - How many papers are in the pipeline awaiting a production check
- Turnaround times:
  - How long papers wait in the queue from acceptance to production check
Workflow Experimentation

- How did backlog and turnaround data change when implementing various paper-processing workflows?
  - Positive and negative
  - Implementation of “priority lists”
    - Papers able to jump the queue in order to fill an issue
  - Cut queries/checks that are relatively unimportant
- Workflows:
  - “Specific assignments” (tasks assigned to specific editors, separated by journal) vs.
  - “Shared responsibility” (everyone works on what they’re able)

Turnaround Times

[Graph showing workflow changes and turnaround times over time, with markers for holidays, PE out, and workflow changes.]
Findings

- Visible from data:
  - Output variations
  - Staff changes affected numbers, including trickle-down from senior staff
  - Holidays and extended staff absences
- Not directly visible from data:
  - Brief staff absences/vacations
  - Competency of individual employees varies
  - Changes in attitude and motivation among staff
- Slower turnaround does not always equal higher backlog
  - Could indicate uneven work levels across staff
Conclusions

- Workflow type contributed to turnaround times and backlog number—but not completely
  - Shared responsibility vs. individual responsibility
- Non-workflow factors also contributed
  - Vacation, morale, competency
- The most efficient workflow might change per the organization
  - Dependent on staff makeup/skills
- We have a lot of work to do!