**Assessment of Journal (to outgoing EiC)**

**Name of Journal:** *ACM Transactions on Computing Education*

**Name of EiC:** Chris Hundhausen

**Date:** October 20, 2020

We thank you for all of your years of service as ACM Editor-in-Chief. Before we appoint a new EiC, we are seeking your help to assess the journal. Your comprehensive feedback (no more than four pages) is much appreciated and will be used to help guide the future direction of the journal. ***N.B.:*** *As part of the assessment process, we will be sharing this information with the SIG-chairs, journals AEs, and other EiCs. It will also be shared with the next EiC.*

**What is your assessment of the overall health of the journal, including its strengths and weaknesses?**

ACM TOCE is the premier archival-quality research journal for computing education. It has experienced phenomenal growth during my tenure, with annual submissions rising from around 50 in 2015 to near 250 in 2020. Along with this increase in submissions, the journal has seen a broadening of the topics addressed by submissions. When I first took over, the focus was squarely on undergraduate computing education. Some six years later, TOCE is publishing a substantial number of papers focused on K-12 education and on broadening participation in computing. I view both of these trends as positive indicators of the health of journal.

**How would you compare the actual coverage of topics during your term with the journal’s editorial charter?**

In 2019, the TOCE Editorial Board updated the journal’s editorial charter to bring it into better alignment with our modern vision of the journal’s scope. The new editorial charter, which can be found at <https://dl.acm.org/journal/toce/scope>, reflects the journal’s interest in publishing “high-quality…research articles on the teaching and learning of computing from childhood through adulthood.” As the new charter states, TOCE welcomes studies of diverse aspects of computing education in a broad range of formal and informal settings. In addition, TOCE welcomes work that draws on a diversity of learning theories and research methods.

I believe that this charter well characterizes the broad range of articles that have been published in TOCE during my tenure. Indeed, TOCE has aimed to be responsive to the growth, diversity and evolving settings of computing education.

**Which are the competing publications in the area of the journal?**

*Computer Science Education* (published by Taylor & Francis) is ACM TOCE’s main competitor. Journals on engineering education, including the premier *Journal of Engineering Education* and *IEEE Education*, also overlap. To a lesser degree, broader journals on education (e.g., The Educational Practitioner) and technology and education (e.g., *Computers & Education*, *IEEE Transactions on Learning Technologies*) also compete.

**Please provide a brief overview of the journal review process, and also include your approximate desk reject rate.**

ACM TOCE's monthly review process is initiated on the first day of each month. On that day, the Editor-in-Chief performs a preliminary review of all papers received by 8:00 am. Pacific Time on the first day of the month. That peer review process proceeds as follows: For each submitted paper, the Editor-in-Chief first evaluates the suitability of the paper for the journal. If the paper is deemed to be a reasonable fit, the Editor-in-Chief assigns the manuscript to an Associate Editor. The Associate Editor assigns the paper to at least three reviewers, and, based on these, makes a recommendation to the Editor-in-Chief. The Editor-in-chief's decision is based on these reviews and the Associate Editor's recommendation.

In the most recent three year period for which data are available (2016-2018), the desk reject rate was 48% (2016), 45% (2017), and 60% (2018).

**What new initiatives did you pioneer for the journal? Which were successful?**

As Editor-in-Chief, I have led seven key initiatives to improve the journal.

1. *Developed New Review Form*. In response to feedback from journal reviewers and associate editors, the TOCE developed a new review form template in 2016. The review form template provides reviewers with clearer guidance on how to review papers and write helpful reviews. Feedback I have received from authors suggests that this change has been much appreciated; authors have received more directed and helpful feedback on how to to change their manuscripts to make them acceptable for publication.
2. *Streamlined review process.* When I took over as TOCE E-i-C, authors received preliminary decisions within an average of four to six months. In 2016, I made changes to the review process to reduce this time to an average of 70 days. The key change was to establish clear guidelines for TOCE Associate Editors regarding how long a paper should remain in each phase of the review process. Based on data collected in the period from 2016 to 2018, this initiative has exceeded expectations: The average turnaround time for a new submission has been reduced from 90 days in 2016 to 49 days in 2018.
3. *Developed Partnership with ACM SIGCSE*. In collaboration with the ACM SIGCSE Board, ACM TOCE developed a policy that allows authors of papers published in TOCE to present their work in a “TOCE Track” at the ACM SIGCSE Conference. According to this policy, when TOCE authors are notified of paper acceptance, they are given the opportunity to express interest in presenting their paper at the next ACM SIGCSE Conference. Names of interested TOCE authors are forwarded to the ACM SIGCSE Program Chairs, who then select the papers to be presented in special “TOCE Tracks” based on perceived alignment with ACM SIGCSE and the time and space constraints of the conference. Since 2017, ACM SIGCSE has included TOCE papers in their program. In some years, all interested authors have been accommodated. In others, only a subset could be accommodated. Feedback on this initiative has been overwhelmingly positive. TOCE Tracks at ACM SIGCSE have been well attended, and TOCE authors are enthusiastic about the opportunity to present their papers at a reputable computing education conference.
4. *Instituted* *Double-blind Review Process*. In 2018, ACM TOCE adopted a double-blind review process in which authors are required to anonymize their papers and references prior to submission. This change came about in an effort to make the journal’s review process more scientifically rigorous and to bring it into better alignment with the review process of other reputable journals. While it is difficult to assess whether this change has led to higher-quality and less-biased reviews, it has at least led to a more perception that TOCE’s review process is more scientifically rigorous.
5. *Created Annual Editorial Board Meeting*. To promote a better sense of community among the TOCE Editorial Board, and to provide a venue for the discussion of initiatives to improve the journal, I began holding annual TOCE Editorial Board meetings in conjunction with the ACM SIGCSE Conference in 2018. Since many TOCE Board members attend ACM SIGCSE, this seemed like an ideal venue for these meetings, which roughly one-third of the board has attended. The global pandemic put a temporary halt to these meetings, and also identified the importance of making these meetings more generally accessible through a Zoom option. Beginning in 2021, these meetings will take place both face-to-face (pandemic permitting) at SIGCSE and virtually through Zoom teleconferencing.
6. *Developed New Decision Categories*. The journal received feedback that the “Major Revisions” decision category is misleading because it implies that a paper will eventually be accepted if major revisions are made. In fact, we know this is not the case: Under current TOCE policy, a revised submission of a paper that received a decision of “Major Revisions” is subjected to a second round of peer review. If that second round of peer review also yields a decision of “Major Revisions,” the paper is removed from the peer review process—i.e., it is rejected. To bring TOCE's paper decision categories more into alignment with those of other journals, we have adopted the following revised set of decision categories: "Revise and Resubmit," "Accept with Revisions," "Reject," and "Accept." These decision categories will take effect in January 2021.
7. *Developed Reporting Standards.* In line with other premier research journals, the ACM TOCE Editorial Board has been exploring the possibility of developing a set of evidence or reporting standards for its submissions. In 2019, we formed an “Evidence Standards” Task Force consisting of five members of the Editorial Board. In 2020, the Task Force developed a draft proposal for evidence standards, which has been rigorously reviewed and discussed by the Editorial Board. Based on these discussions, we have found near consensus for the idea of recommending a set of “reporting” standards for all TOCE papers based on the [American Psychology Association’s Journal Reporting Standards (JARS)](https://apastyle.apa.org/jars) . We are attracted to JARS because it is well established, is relevant to a broad range of possible research papers, and can be readily adapted to the needs of ACM TOCE. We are rolling out this reporting standard, which will be optional for TOCE authors, in January of 2021.

**Is there anything else that you can say to help us in the assessment of the journal?**

I am truly excited about the growth and trajectory of ACM TOCE. Its new charter, which makes a point of defining computing education broadly and welcoming a diversity of research methods conducted in a diversity of venues, has contributed to a steady increase in submissions and a growing international following. In addition, ACM TOCE’s many initiatives to improve its review process, and to improve the quality of the papers it publishes, positions the journal as a premier publication venue for computing education research.