

Editorial

Developing a Reading Habit: Preparing for and Contributing to a Research Community

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At the most recent *MTE* journal presentation during the NCTM Research Conference in Washington, DC, titled “Could I Publish This in *MTE*? Advice from Published Manuscripts in the *MTE* Journal” (Crespo, Chao, & Yow, 2018), we asked the audience the following questions:

- Who is intending to write a manuscript for the *MTE* journal?
- Who is a reviewer for the journal?
- Who is a reader of the journal?

The number of raised hands rapidly decreased as the audience (of about 40) answered our questions. This illustrates a serious problem for the field, and that is the focus of this editorial: the ever-increasing workload demands that leave us with much less time to read and keep up with the published works in our scholarly community, particularly works that push us beyond our boundaries and help our field evolve.

In this editorial we argue that reading on demand—meaning the narrow searching for citable studies to include in a literature review of a manuscript—is not as productive as one might think for getting published. But, perhaps more important, it has serious consequences for the field of mathematics teacher education. As scholars, we are often enculturated into the world of academic writing with encouragement to “contribute to an ongoing conversation.” Reading on demand is akin to stepping into a conversation at a party, listening for 30 seconds, and then “taking the floor.” As you might imagine, your contributions might seem to others in the conversation as naïve or lacking an understanding of key assumptions and discussions about relevant work.

We focus this editorial on a common challenge of writing for publication that is particularly challenging to prospective authors of the *MTE* journal—situating and making

explicit the contributions a manuscript makes to ongoing conversations in the field and to the relevant research literature. This relates to the third and fourth review criteria used to judge the quality of submitted manuscripts by *MTE* reviewers.

- The manuscript provides a connection to the existing knowledge base in mathematics teacher education and is grounded in theory and/or on previously published articles.
- The manuscript makes explicit the specific new contribution to our knowledge. [Findings should be reported with enough warrants so that recommendations for policy and practice can be constructed or justified.]

In the *MTE* writing tool that was shared in the March 2017 editorial (Crespo, Martínez, Dubbs, & Bieda, 2017) ([https://www.nctm.org/Publications/Mathematics-Teacher-Educator/2017/Vol5/Issue2/So-You-Want-to-Be-an-MTE-Author -A-Tool-for-Writing-Your-Next-MTE-Manuscript/](https://www.nctm.org/Publications/Mathematics-Teacher-Educator/2017/Vol5/Issue2/So-You-Want-to-Be-an-MTE-Author-A-Tool-for-Writing-Your-Next-MTE-Manuscript/)), these criteria form the basis for the bookends of a manuscript’s argument. These include identifying and articulating a shared problem of practice for *MTEs*, situating that problem within the research literature (To which existing knowledge base in mathematics teacher education does the manuscript connect? In which theory and/or on which previously published articles is the manuscript grounded?), and eventually articulating the following questions: What specific new contribution to our knowledge does the manuscript make explicit? What discussion does the manuscript contain about how this study can inform or influence the shared problem of *MTEs*’ practice?

In the September 2017 editorial (Crespo et al., 2017), we discussed an associated challenge of these criteria, that of articulating a shared problem in the practice of mathematics teacher educators. In that editorial we associated this challenge with what Graff and Birkenstein (2010) discuss about the writing process as that of entering and relating to ongoing conversations. This relates to one of the recurring questions we, as editors of this journal, hear from prospective authors: Is our manuscript a good fit for the *MTE* journal? This is a reasonable question for a journal that is relatively new and that publishes only two issues for a total of about eight articles per year. Altogether *MTE* has published 12 issues (13 if we count this issue) since September 2012, for a total of at least 48 articles. This is both a challenge and an opportunity

for prospective authors. The obvious challenge is that because the journal has published only 12 issues, the low volume of articles make it hard to get a feel for a “typical” *MTE* article. This is also an opportunity because manuscript authors can review all the *MTE* published articles and become acquainted with the ongoing conversation the authors of published articles have been having and how they have framed their manuscripts as conversing with and contributing to the larger conversations within the field of mathematics teacher education.

In this editorial we delve deeply into the issue of “journal writing as entering and relating to ongoing conversations” by identifying common challenges of, and the advice offered to, unsuccessful manuscript authors. We then illustrate how the articles published in this issue successfully met those challenges.

Red Flags of Narrowly Reading the Literature

The following excerpt of feedback from a decision letter to an author of a rejected manuscript illustrates what we are finding to be a pattern in the feedback that reviewers provide when manuscripts exhibit telltale signs that the work has not been situated sufficiently within the ongoing conversation that mathematics teacher educators have been having about their practice.

Elaborate the framework of teaching-as-experiment by Hiebert, Morris, and Glass. Notice reviewers 1 and 2 wanted to know more about how this framework relates to or is different from other frameworks MTEs have used to design experiences for PSTs that engage them in learning from reflecting on their teaching practice. Surely this is an idea that has been around at least since John Dewey likened teaching to scientific inquiry. Hence, I encourage you to provide a bit of the history of where this framework comes from and how it is situated in the larger picture of the teacher learning literature. You may also want to tell the reader about affordances and limitations of this framework.

In this excerpt the feedback suggests to the authors to articulate more clearly the ongoing conversation they are entering. Imagine that you enter an ongoing conversation with professional movie critics who are discussing the most recent movie by stating that you have not seen that movie but like the movie *Hidden Figures* (Gigliotti, Chernin, Topping, Williams, & Melfi, 2016). This kind of statement will not go very far in such a conversation. As we mentioned before, entering and contributing to

an ongoing conversation requires listening in for a while and then making connections with what others have said previously. In other words, a much more informed contribution to the conversation will make relational statements that agree, disagree, elaborate and/or question what has been said before.

The same is expected of manuscripts when they situate the work within an ongoing conversation in our field. Reviewers can spot a reading-on-demand approach to manuscripts and respond to it in various ways. Reviewers familiar with the ongoing conversations in mathematics education research will easily identify common red flags in manuscripts that do not pay sufficient attention to this challenge. We share some of the typical issues in the table below that tend to show up in reviewers’ feedback when the author has been reading on demand. Addressing this feedback will help prospective *MTE* authors situate their work more firmly within the ongoing conversations in the field of mathematics teacher education.

Entering and Contributing to Ongoing Scholarly Conversations

The manuscripts in this issue provide excellent examples of how to enter and contribute to an ongoing conversation in a scholarly community. I and Stanford (this issue) speak to the ongoing conversation that is of critical importance regarding how to prepare prospective teachers in the United States to work with emergent bilingual learners. They share results from a project featuring a multifaceted activity that both immerses monolingual prospective teachers in an experience that approximates the challenges emergent bilinguals may face in classrooms as well as supports prospective teachers’ understanding of curricular adaptations that enhance emergent bilinguals’ learning experiences in mathematics.

Phelps-Gregory and Spitzer (this issue) situate their article in the long-standing conversation in the field of teacher education about the importance of developing a reflective practice, and how teacher educators might assess prospective teachers’ facility with constructing hypotheses about teaching that are responsive and resonate with evidence of student thinking. Authors I and Stanford bring in literature to span conversations over often disparate fields (mathematics education and bilingual education), whereas Phelps-Gregory and Spitzer reference and expand on conversations that are primarily by those engaged in the work of mathematics teacher education.

Brown and Masloski (this issue) situate their work in the professional development (PD) of teachers, emphasizing the connection between PD and in-service teachers’

Red Flag	Reviewer Feedback
<i>When authors state that “little is known about ...”</i>	Reviewers question such sweeping claims and tend to include a list of relevant references that were not cited in the manuscript.
<i>When the authors do not address alternative viewpoints/frameworks/theories or do not address typical critiques or limitations of their viewpoint/framework/theory</i>	Reviewers request elaboration on the chosen viewpoint/framework/theory and why others were not cited or not considered to guide or frame the design of an innovation or the analysis of the effectiveness of that innovation.
<i>When the literature review is missing key references from the literature base</i>	Reviewers raise questions about the author’s relation to the field: How seriously are the authors engaged in, following, and contributing to <i>shared</i> problems of practice?
<i>When a reference is cited in the text but not included in reference list and/or when the reference list includes authors not cited in the body of the manuscript</i>	Reviewers may see this as an indication of carelessness and wonder about what else in the manuscript is inaccurate.

learning and practices. These authors build on Horn’s *teaching replays* (2010), a teacher-generated narrative vignette of a classroom experience, as a potential snapshot of teacher noticing (with an expected and thorough discussion of van Es and Sherin’s noticing framework). Brown and Masloski’s literature review discusses teacher noticing, effective practices for professional development, and teaching replays, explicitly situating their article as extending each of these areas in specific ways. Further, the authors situate their current article within a broader context of their own ongoing PD work, which together with the reviewed literature paints a clear picture of the ongoing conversation within mathematics teacher education.

In their study of teachers’ understanding of multiplicative structure and divisibility, Feldman and Roscoe (this issue) explicitly address a shared problem of practice: how to deepen a preservice or in-service teacher’s own procedural knowledge to support instructional practices that promote procedural fluency in their students. This work is situated in the ongoing conversation about teachers’ knowledge of the mathematics they teach. Given their focus on teachers’ knowledge, Feldman and Roscoe explicitly position themselves within a particular learning theory, constructivist (Piaget and von Glasersfeld perspectives), which is interwoven in the design of their intervention. They seamlessly bring together what are often disparate and disconnected conversations about theories of student learning and theories of teacher learning.

The four articles in this issue showcase the diversity of ongoing conversations to which mathematics teacher educators are contributing. Clearly the authors of the articles featured in this issue have spent considerable time reading and listening to ongoing conversations of

mathematics education researchers. Altogether these four articles as well as articles in previous issues provide readers with excellent examples of ways to enter and contribute to ongoing scholarly conversations in mathematics teacher education. The advice from scholars who study the writing challenges of academics, and our advice now as experienced editors of this journal, is that to join and contribute to an ongoing scholarly conversation, we must develop a serious reading habit.

Advice for Developing a Reading Habit (or How to Listen to the “Conversation”)

Becoming a published author in this and many other peer-reviewed journals requires a serious investment in reading the literature, not on demand but as an intentional and deliberate scholarly practice. Next, we share some concrete advice for developing a reading habit that can have a positive impact on your success in disseminating your research.

Tip One: Read Intentionally, Rather Than Instrumentally

Good conversations involve not only making statements but also asking questions. If we read literature in our field by first identifying articles that feature particular keywords in their titles or abstracts, and then looking for what the articles have to say about our topic of interest, we are reading with the aim of getting information but not necessarily with the aim of joining and responding to a conversation. Rather than this kind of instrumental approach to reading, we advocate an *intentional* approach that is guided by a question about our topic of interest. Some questions may invite us to gain knowledge

about empirical findings (e.g., In what ways can student work samples be incorporated into mathematics content courses?) or an understanding about ways to present our scholarship (e.g., How do other scholars present results from participant narratives?) or understand critical or alternative views (e.g., What theories do medical education researchers use to understand residents' learning?) When we ask questions of existing literature, we naturally position our scholarship in such a way that both listens and responds to the conversation in the field.

We especially encourage you to be intentional about not only what you hope to learn from reading but also *where*, *who*, and *how* you are reading. In our tips below, we offer suggestions for how to curate your "playlist" of readings. Transformative scholarship comes from reading both within one's familiar scholarly community (i.e., those journals you subscribe to or have published in) and outside of it. Determining where to look outside of one's scholarly community starts by asking, What's missing in these articles I am reading? Whose voice or ideas may not be represented?

Associate Editor Kristen Bieda recently discovered *The Mathematical Intelligencer*, a journal devoted to expository writing about mathematics. This journal is a source for insight into mathematicians' views about mathematics through their expository writing, rather than through responses to interview questions. Similarly, Editor Sandra Crespo is currently engaged in a collaborative writing project for a chapter in an international handbook for research in mathematics teacher education. This has entailed reading about mathematics teaching in different parts of the world not only in journals that publish in English but also in other languages. The takeaway from these examples is that opportunities to find inspiration in the work of others should not be reserved for those only within our own inner circle. Broadening our playlist of go-to authors and articles will enrich not only our scholarship but also that of the field. And one way to discover new places to read is by starting a reading group, our next tip.

Tip Two: Start a Reading Group

One reason that writing groups, book clubs, and exercise buddies can be so effective is the built-in accountability you have when you engage in the activity with others. Setting up a regular time to meet with a reading group not only helps you stay accountable for doing the work but also, more important, encourages scholarly discussion and debate about the ideas in the articles. It is nice when Meeting face-to-face members of the reading group can, but such online technologies as GoTo Meeting and Zoom allow colleagues across time zones to be in the

same reading group. Keeping the group to a manageable size is also important, particularly so all participants have a chance to share their thinking and respond to others' thinking. In our experience, groups of no more than eight people can function effectively as a reading group. Also, we have found that groups composed of scholars at different stages in their careers, including graduate students, lead to rich discussions. Although you may hope to read new articles each week, a quarterly or even twice-yearly meeting of a reading group is a manageable schedule that can offer tangible benefits for participants. Finally, picking a theme that is based on a domain of the knowledge base of mathematics education helps narrow the number of possible articles to read and maintains a consistent theme in the reading group's collective work. In essence, within each reading group, a conversation emerges that informs members' understanding of the larger conversation in the field.

Tip Three: Use email alerts, social media, and blogs on mathematics education to help you curate new work

Many journals offer email alerts sharing information about newly published material, which you can subscribe to even if you do not have an individual subscription to a journal. For instance, you can register for a free SAGE Journals account, which then can be used to sign up for email alerts. Subscribing to or "liking" a journal's Facebook® page or other social media can provide an alternative way of receiving updates about new publications, although such networks less frequently target new publications. Many great blogs on mathematics education exist and highlight insightful new work. And there is even a way to learn about new articles without actually doing any reading! The Math Ed Podcast (<https://mathed.podomatic.com/>), hosted by Dr. Samuel Otten at the University of Missouri, presents interviews with authors for selected recently published articles.

Tip Four: Schedule your reading

Once you have a reading group to motivate your reading habit and sources for great new reading material, the next step is to schedule time to actually read. Most academics know the importance of writing daily or scheduling time for writing amidst the slurry of committee work, advisee meetings, classes, and teaching preparation that would otherwise occupy every available free moment. However, scheduling a time to read is just as critical as the other work. For those *MTE* readers who work in teacher education settings outside of academia, reading is an important catalyst for shaping the everyday work with teachers you may do. It keeps you connected to research, and it provides a way to access new perspectives. Unfortunately,

we know of no shortcut to simply entering in your calendar times when you will read. Starting your work week with an hour block of reading time can not only help you hone a reading practice but also be a gentle way to feel productive at the beginning of the week. Some people build in reading time along with their blocks of writing time; even adding an extra 15 minutes can be time to spend skimming the main ideas of an article and making notes of places you would like to read more deeply.

We hope that these tips provide a tangible way to enact the reading practice you hope to develop. We particularly encourage those mentoring emerging scholars to convey the message that reading is not secondary to the other scholarly work they may be asked to do; reading in one's field is a requirement of being a productive member of that field that naturally leads to becoming a prolific and published scholar.

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