Appendix 18. Sample Manuscript Submission with Cover Letters

Appendix 18. Sample Manuscript Files

COVER LETTER SAMPLE

Mathematics Teacher: Learning and Teaching Pre-K–12

Cover Letter: MTLTPK12-2020-0062

Thank you for considering our manuscript. It is not under review by any other journals at this time.
A. Barlow

REVISED MANUSCRIPT AUTHOR RESPONSE LETTER SAMPLE

Notice that the authors sign the letter anonymously; additionally, they have responded to editor and reviewer comments in a point-by-point summary response.

May 12, 2020

To Whom It May Concern:

Thank you for the opportunity to revise our manuscript, "Maximizing the Impact of Mobile Devices." We believe the reviewer feedback has resulted in a stronger manuscript.

In response to the feedback, the following changes have been made.

- We have inserted a table that has questions to ask related to each of the features.
- We have added a statement to the "Why Attend . . ." section to indicate that it is not necessary to have all three features in a single lesson.
- We made the requested change to wording and added supporting citations (Process Standards, Common Core (SMP), Mathematics Teaching Practices, and Strands of Mathematical Proficiency (NRC)).
- We added a sentence to bring clarity to why this addition app video case is an example of personalization.
- The AE comment regarding value added helped us to better articulate the role of mobile technology and the descriptions in the framework. Therefore, we have utilized the "value-added" phrase throughout. We feel this helps not only to connect back to Janet's story at the beginning but supports the reader's understanding of the purpose of the framework.
- The presentation of the three categories in the text has been changed to match the introductory video.
- We added language to the statement connected to the first video to clarify that its intent is to explain what is meant by mediating the student's experience.
- Statements have been added to personalization and authenticity to highlight why they are examples of the associated feature.

Thank you for this opportunity to revise and resubmit. We look forward to hearing from you soon.

Sincerely,

The Authors

MANUSCRIPT SUBMISSION SAMPLE

Notice the inclusion of digital assets; these are not required but are preferred. Be sure anonymity is maintained when adding digital links. If that is not possible, remove links and place in a separate file categorized as "Supplemental files NOT for review"

Maximizing the Impact of Mobile Devices

Janet's elementary school recently purchased a mobile cart of iPads. Eager to use them with her students, Janet began searching for mathematics lessons that incorporated iPads. She summarized her findings by saying, "I found a lot of lessons that used iPads. I wasn't sure, though, if the iPad was influencing the students' learning. Most of the lessons that I found could have been taught without the technology --- like students completing a worksheet on the iPad."

Like Janet, we wondered how to utilize iPads and other mobile devices in elementary mathematics instruction in impactful ways. This led us to the M-Learning Framework (Kearney, Schuck, Burden, and Aubusson 2012), which considers the use of mobile technology as a mediator of students' learning experiences. In this article, our goal is to highlight the M-Learning Framework as a way to view effective use of mobile devices, such as iPads, in the elementary mathematics classroom. Following an overview of the framework, we provide three video cases as examples of the framework's key features along with a description of why attending to these features is important.

The M-Learning Framework: An Overview

When discussing mobile learning (or m-learning), many educators tend to focus on the affordances of the technology (Traxler 2007). From the earlier example of accessing a worksheet via an iPad, such affordances include ease of distribution/collection of the worksheet, which is an affordance related to the teacher's perspective regarding classroom management. In contrast, the M-Learning Framework (Kearney et al. 2012) focuses on the technology from the learner's perspective. Specifically, attention is given to how the mobile device mediates the students' learning experiences (see video 1 M learning w music.mov). The framework includes three key

features: authenticity, collaboration, and personalization. The features are discussed in the following sections.

Authenticity

Mobile technology can be used to provide students with access to meaningful practices in the real world. This feature of mobile technology is referred to as authenticity and can be considered at three levels: problems set in real-word contexts (task authenticity); realistic task details (factual authenticity); and true-to-life engagement in the practices of a community (process authenticity). Regardless of the level, the key is that the mobile device mediates the authentic experience.

As an example, consider the video case involving the Paper Chain Problem (insert video 2 Paperchain3.mov). In this lesson, the teacher encouraged students to engage in the practices of mathematicians, specifically creating representations of problems. The mobile technology provided the tools for students to engage in this practice, as students chose to use virtual base-ten blocks. In this way, the use of the mobile device exemplified the m-learning feature of process authenticity.

Collaboration

A second key feature identified in the M-Learning Framework is collaboration. Often involving conversation, dialogue, and/or feedback, collaboration is an aspect of a student's learning experience that can be mediated by mobile technology. As an example, the Maximum Area Challenge video case (insert video 3 Maximum Area.mov) features students receiving feedback from a local preservice teacher. The communication that occurred between the students and the preservice teacher was made possible by the mobile device and, therefore, represented the m-learning feature of collaboration.

Appendix 18 (continued)

Use standard (and consistent!) formatting in MS Word to distinguish between heading levels. MTLT allows up to four levels of headings.

Personalization

Finally, mobile devices can provide learners with opportunities for customization of their learning experiences as well as learner choice. Further, by giving the learner control over the pace and goals of learning activities, the mobile device provides opportunities for agency and self-regulation. These features (i.e., customization, learner choice, agency, and self-regulation) represent aspects of personalization.

The Addition App video case (insert video 4 new Addition App.mov) shows students working through addition problems via an app. As demonstrated in the video case, the students' correct and incorrect answers determined the next problem to be presented to the student. In this way, the mobile device provided a customized learning experience for the students, which represented the key feature of personalization.

Why Attend to these Features

Mathematics lessons that are characterized by authenticity, collaboration, and/or personalization generally represent strong lessons, regardless of whether these characteristics are mediated by a mobile device. For example, collaboration among students that results from the proximity of the students is just as beneficial for the learning process as collaboration that results from the use of a mobile device. However, when the collaboration is mediated by a mobile device, it opens conversations that might not be possible otherwise and can broaden and enrich the learning process. Imagine examining the solution processes of students from another part of the country – or the world! Imagine students receiving feedback from a mathematician or other professional. Mobile devices can be used to virtually transport students beyond the classroom to access contexts to be modeled (authenticity) or to access learning supports that are tailored to the needs of the individual student (personalization). These key features of the M-Learning

Appendix 18 (continued)

All references should be listed in the text and vice versa. Self-citations should be referred to as "Author (year)" in text as in the reference list. No additional publication information should be given in the reference list.

Framework (Kearney et al. 2012) can guide teachers in evaluating the use of mobile devices in mathematics lessons.

Conclusion

The M-Learning Framework (Kearney et al. 2012) provides a means for thinking about how to use mobile devices, such as iPads, in ways that positively influence students' learning experiences. The three key features (i.e., authenticity, collaboration, and personalization) represent aspects of effective mathematics instruction that have been described in documents such as the Standards for Mathematical Practice (NGA Center and CCSSO 2010) and the Mathematics Teaching Practices (NCTM 2014). The framework, though, brings attention to the use of mobile devices in mediating these aspects of effective mathematics instruction and, in doing so, expanding the opportunities for students' learning. Our hope is that as teachers examine mathematics lessons that incorporate mobile devices, they will consider this framework so as to maximize the technology's affordances and positively influence students' learning.

References

Kearney, Matthew, Sandra Schuck, Kevin Burden, and Peter Aubusson. 2012. "Viewing Mobile Learning from a Pedagogical Perspective." *Research in Learning Technology, 20*: 14406.

National Council of Teachers of Mathematics (NCTM). 2014. *Principles to Actions: Ensuring Mathematical Success for All*. Reston, VA: NCTM.

National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). 2010. *Common Core State Standards for Mathematics*. Washington, DC: NGA Center and CCSSO. http://coresstandards.org.