## Book Review/Recension d'ouvrage

Assessment that Matters: Using Technology to Personalize Learning

by Kim Meldrum

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The role of digital technology in the K-12 classroom is more important now than ever before. Technology-enabled teaching and learning is considered vital to develop students' 21st century skills (Partnership for 21st Century Skills [P21], 2009), engage students with learning experiences that leverage their interest in and intuitive attraction to digital technology and social media (Dede, 2014), and transform assessment as and assessment for learning by allowing new forms of media creation and decreasing time between feedback cycles (Ontario Ministry of Education, 2016).

It is this third point that grounds *Assessment That Matters*, a guide that approaches technology as a pedagogical advancement, and more importantly, a vehicle to refine assessment. Traditionally synonymous with testing or grading, assessment has become a powerful tool teachers can use to understand the needs of individual students, plan pragmatic learning experiences, and provide a more holistic report of student achievement. In *Assessment That Matters*, Kim Meldrum builds upon the theoretical depth of assessment by introducing a technology-driven approach to assessment for learning, assessment as learning, and assessment of learning.

Meldrum prefaces the book by situating herself as a teacher, administrator, and consultant "in the twilight of [her] teaching career" (p. vii.). In the introduction, Meldrum defines technology integration, relying on Puentedura's (2013) well-used SAMR Model (substitution, augmentation, modification, and redefinition). The book is then divided into six chapters, each addressing various aspects of technology integration and assessment. Chapter 1 introduces assessment and evaluation, outlining the role of the teacher in each. Chapter 2 describes the influence educational technology (edtech) is having on today's classroom environments. The author also encourages teachers to use edtech to redesign tired teaching practices. Chapter 3 is largely about creating meaningful teaching and learning experiences that consider the Four Cs: consume, create, connect, and curate (P21, 2009). Chapter 5 provides a short commentary on the role of questioning and inquiry, followed by assessment of learning in Chapter 6. The author concludes by encouraging the reader to unpack the strategies they have read about—hopefully tested and tested—through discussion with other educators.

Chapter 4, entitled "Assessment for and Assessment as Learning," is perhaps the powerhouse of the book. The author unpacks assessment as and for learning conceptually before suggesting numerous ways to engage students in consuming, creating, connecting, and curating activities using digital technology. The focus of the book clearly comes out in this chapter: student learning can be transformed by providing students meaningful ways to demonstrate learning using digital technology. The chapter also contains some especially useful strategies for assessing various strands of the language arts and STEM curricula.

Interspersed throughout are connections to a variety of useful media: books, blogs and vlogs, websites, digital applications, and social media. Throughout the text, Meldrum has inserted QR codes (see www.qrcode.com) which, when scanned using a smartphone, tablet, or other mobile device, direct the reader to a digital resource or link. These are effective in challenging the traditional notion of "text" beyond literal printed documents to a multimodal understanding (New London Group, 1996).

Assessment That Matters strays from the typical format of other guides promoting technology by speaking to the teacher-reader as a peer on a journey. Meldrum challenges readers to "develop [their] skills in the use of technology as a tool for learning and understand its ability to provide ...rich assessment information" (p. xvii). Meldrum writes

from a position of experience, recounting conversations between herself and other digital technology practitioners, teachers, and colleagues. She encourages teachers to develop connections with their colleagues and to connect with other educators on social media to create a professional learning network (PNL), because "just as students have access to a wealth of knowledge, feedback, and support through technology, so do you as an educator" (p. xvi).

There are indeed many compelling reasons why *Assessment That Matters* might find its way onto a bookshelf near you. There are, however, some considerations to be addressed with the work. The first is an inconsistency in the treatment of edtech literature. There are a number of theoretical frameworks and research-informed practices discussed throughout the book; however, only a handful of these include citations or references, and the citations themselves are colloquial in nature. In some cases, concepts referred to are not attributed to their creators, such as the Four Cs of technology integration (P21). Admittedly, I was hoping for a bit more connection to the body of scholarly literature and empirical research. I do acknowledge, however, that in my current role as a teacher educator—not the identified target audience for the book—I bring an inherent penchant for such connections.

Considering Koehler and Mishra's (2009) TPACK framework, a confounding issue is the extent to which technology integration aligns with what teachers already know about good teaching. The TPACK framework—not mentioned in this book—suggests that effective teachers possess content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK). While Meldrum proposes multiple strategies that engage with these three types of knowledge, the lack of explicit connection to TPACK suggests that Meldrum's argument is unique, when in actuality she is contributing to an already robust discussion in the edtech world. This book would do well to more clearly identify sources of such work, so as to allow readers to expand their engagement with ideas beyond those in the book.

The second underdeveloped idea in *Assessment That Matters* is that of critical digital pedagogy. I suspect that this again is due to the author's target audience: classroom teachers. However, it is important to note that teacher education—be it pre-service or in-service—is not solely about the how (implementation or practice), but the why (theoretical) (Barrow, 1990; Korthagen & Kessels, 1999). In my work as a pre-service teacher educator, I often observe in teacher candidates an initial apprehensiveness to the

theoretical aspects of technology integration. I have also witnessed that those students who take the time to understand how their beliefs, assumptions, and attitudes influence their pedagogical decisions tend to become teachers who excel using digital technology in their practice.

A final suggestion to those teachers who wish to use Meldrum's book as a guide to implement various technological assessment practices in their classroom: learning how to use new digital tools can be a labour-intensive activity, as is planning for integrating them into assessment practices. I would advise teachers against implementing technology into their practice without careful consideration of how new actions promote or undermine already-held beliefs about teaching and learning. The back cover of Assessment That Matters includes accolades from various educators, one which suggests that "this book should be required reading for all students in teacher-preparation programs as well as future curriculum and instruction specialists" (Shelton, as cited by Meldrum, 2016). I would agree. The robustness of Meldrum's explanations of assessment in such a compact volume coupled with the practical nature of the tech-enabled assessment practices make it useful for the teacher who needs creative inspiration. Equipped with an informed approach to teaching and learning and experience with formative and summative assessment, this book can be a powerful tool to for teachers to transform student learning experiences. All things considered, Assessment That Matters is a small yet mighty investment to assist educators who wish to integrate technology into assessment. In a world consumed with data collection, Meldrum calls teachers to provide students with "the guidance, encouragement, and direct instruction they need to become curious and innovative lifelong learners" (p. 77). What a timely and beneficial challenge.

## References

Barrow, R. (1990). Teacher education: Theory and practice. *British Journal of Educational Studies*, 38(4), 301-318. https://doi.org/10.1080/00071005.1990.997 3859

Dede, C. (2014). The role of digital technologies in deeper learning. *Students at the center: Deeper Learning Research Series*. Boston, MA: Jobs for the Future.

- Koehler, M. & Mishra, P. (2009). What is Technological Pedagogical Content Knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education*, *9*(1), 60-70.
- Korthagen, F. A., & Kessels, J. P. (1999). Linking theory and practice: Changing the pedagogy of teacher education. *Educational Researcher*, 28(4), 4-17. https://doi.org/10.3102%2F0013189X028004004
- Meldrum, K. (2016). Assessment that matters: Using technology to personalize learning. Irvine, CA: EdTechTeam Press.
- New London Group. (1996). *A pedagogy of multiliteracies: Designing social futures*. Harvard Educational Review, 66(1), 60-92.
- Ontario Ministry of Education. (2016). 21st century competencies: Foundation document for discussion. Phase 1: Towards Defining 21st Century Competencies for Ontario. Toronto, ON: Queen's Printer for Ontario.
- Partnership for 21st Century Learning. (2009). *Framework for 21st century learning*. Retrieved from http://www.p21.org/our-work/p21-framework
- Puentedura, R. R. (2013, May 29). *SAMR: Moving from enhancement to transformation* [Web log post]. Retrieved from http://www.hippasus.com/rrpweblog/archives/000095.html