Research in a Nutshell

@RiaN4Teachers

A Message from the Editorial Team

This issue of *Research in a Nutshell (RiaN*) marks a promising step forward for the publication. We have expanded the previously empirical-only focus of *RiaN* to showcase how education research can complement and be complemented by other ways of knowing. Being evidence-informed means engaging with the full constellation of different types of evidence that can inform your practice. In this issue, our contributors offer guidance on the topics of assessment, Problem Based Learning as a professional learning model, as well as Indian day and residential schools in Canada. As with past issues, our hope for these snapshots is that you will be inspired to engage with the content as well as the contributors.

Sincerely, Stephen MacGregor, Lindsay Mainhood, and Sofia Melendez (RiaN@queensu.ca)

How does teacher education influence teacher candidates' assessment literacy? Andrew Coombs, PhD Candidate	How can Problem Based Learning be used to inform preservice teachers' learning? John Bosica, PhD Candidate
 Why is this topic important? To adequately prepare teachers for the realities of classroom assessment practice, we need to have a better understanding of how teacher education shapes teacher candidates' (TC) assessment literacy (AL). What did this research uncover? In this longitudinal study, substantial changes were noted in TCs' AL before and after their completion of a course on classroom assessment and 10-week 	 Why is this topic important? Secondary school preservice mathematics teachers have an abundance of things they need to become proficient in before entering the classroom—mathematics curriculum, 21st century skills, assessment strategies, and increasing their knowledge of overall "best-practice" pedagogical strategies. Problem Based Learning (PBL) has promise as a professional learning model for teachers.
 practicum. However, there was no common pattern to this change among TCs during coursework or practicum. It appeared that each TC interpreted and learned from experiences within each context differently. 	 What did this research uncover? This study uncovered significant changes in preservice teachers' mathematics teaching beliefs and mathematics teaching self-efficacy throughout PBL instruction.
 Why do these findings matter? The results of this study support the notion that AL is a dynamic, context-dependent social practice. How TCs make sense of competing and potentially incongruent messages about classroom assessment throughout their pre-service program needs to be explored more deeply. 	 Why do these findings matter? The results from this research help to promote PBL as an effective professional learning model for preservice teachers. It helps to expand the small amount of PBL literature in preservice education research and advocate for the introduction of PBL as a teaching methodology that increases preservice teacher professional knowledge.
Gareis, C., Barnes, N., Coombs, A. J., DeLuca, C., & Uchiyama, K. (in press). Exploring the influence of assessment courses and student teaching on beginning teachers' approaches to classroom assessment. <i>Assessment Matters</i> . <u>https://www.nzcer.org.nz/nzcerpress/assessment-matters</u>	Investigating a new preservice teacher learning model. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.). <i>Proceedings of the forty-first annual meeting of the</i> <i>North American Chapter of the International Group for the</i> <i>Psychology of Mathematics Education</i> , pp. 1187-1191. St Louis, MO: University of Missouri.

How different are teachers in China, the U.S., and Canada in their approaches to assessment?

Nathan Rickey, MEd Student

Why is this topic important?

- Teachers' assessment practices are shaped by sociocultural factors.
- Given the importance of assessment in students' learning, understanding how teachers approach assessment in China, the U.S., and Canada is critical in supporting students who move between these contexts.

What did this research uncover?

- Examining teachers' assessment approaches across these contexts, we identified five types of assessors:
 - *Teacher-Centered,* most likely to be in the U.S., favored approaches that guide instruction rather than give students an active role;
 - *Hesitant*, most likely to be found in China and Canada, did not endorse any approaches;
 - *Moderate,* primarily found in Canada, somewhat endorsed student-centered approaches;
 - *Contemporary,* found in every context, prioritized student-centered, individualized approaches;
 - *Eager*, most prevalent in the U.S., endorsed all approaches.

Why do these findings matter?

 As they will undoubtedly teach students from China and the U.S., teachers in Canada must be mindful of how these students have experienced assessment and be responsive to barriers students face in adapting to a new assessment culture.

Rickey, N. H., Coombs, A. J., & DeLuca, C. (2020, June). *Classroom assessment and student mobility across learning cultures: A comparison of teachers' approaches to assessment in China, the U.S., and Canada*. Paper presentation for the Canadian Society for the Study of Education Annual Conference, London, Canada. (Conference cancelled).

Catch up on #RiaN4Teachers Volume 4:

How can student success and risk be predicted from admissions variables?

If reciprocity was a continuous commitment in the design of research, how might research outcomes be different?

What new challenges emerge in history classrooms with commitments to teaching historical thinking and reconciliation?

How do teachers become assessment capable?

How do teachers decide which financial literacy resources to bring into their classrooms?

What is academic language and why do teachers need to know about it?

How is 'gender expression,' a new and nebulous human rights construct, taking shape in Ontario school board policy documents?

Informing our teaching practice: A memoir of Canada's colonial education system Jackson Pind, PhD Candidate

Why is this topic important?

- This memoir offers a firsthand account of the personal and political challenges that survivors of the Indian day and residential schools in Canada faced in their attempts to bring recognition and compensation for their suffering.
- In particular, the book chronicles Raymond Mason's life as a survivor of Indian day and residential schools in Manitoba who campaigned for the rights of over 5,000 Indigenous people with his organization Spirit Wind.
- Mason details the unacknowledged work done by thousands of survivors over many years to obtain the two largest class actions in Canadian history: Indian Residential School Settlement Agreement (2006), and the Indian Day School Settlement Agreement (2019).

What are the key messages in this book?

- Indigenous survivors of the colonial education system were the primary drivers of justice and compensation for crimes committed by the Canadian government in these institutions.
- This text is both a documentation of history and a deeply personal story of a human experience that provides understanding about the ongoing legacy of Indian residential and day schools in Canada.
- Drawing from Indigenous oral traditions as well as Western historiography, the work applies the concept of two-eyed seeing to the histories of colonialism and education in Canada demonstrating that they can be combined effectively for the benefit of each cultural tradition.

How can teachers use these messages in their teaching?

- Teachers can use this book in teaching the legacy of Indian residential and day schools which was mandated by the 2015 Calls to Action (62 and 63).
- Educators may also use the messages of hope, resilience, and activism to inspire students in their own quest for social justice (Recommended for high school/postsecondary students).

Mason, R., Pind, J., & Christou, T. M. (2020). *Spirit of the Grassroots People: Seeking justice for Indigenous survivors of Canada's colonial education system*. McGill-Queen's University Press. https://www.mqup.ca/spirit-of-the-grassroots-people-products-9780228003519.php



Andrew Coombs, PhD Candidate <u>Website</u>

Contributors



John Bosica, PhD Candidate <u>Profile</u>



Nathan Rickey, MEd Student <u>Profile</u>



Jackson Pind, PhD Candidate <u>Profile</u>