

A note from the Editor

Welcome to this special issue of the *Journal of Research in Innovative Teaching and Learning (JRIT&L)*. With this special issue, we invite you to explore just a few ways in which neuroscience research can inform how we design and assess innovative teaching and learning opportunities. Why did we select translational neuroscience as a topic of inquiry? It comes as no surprise that many who hold us accountable for high-quality student learning and development are not necessarily criticizing students' ability to pass tests that measure specific content knowledge. Rather the criticism surrounds lack of evidence of what the National Academics of Sciences refers to as inter- and intra-personal skills (Herman and Hilton, 2017). Intentionally cultivating these skills such as positive future self, conscientiousness, attention regulation, emotion regulation, reflective learning, self-control, openness, effortful control, sense of belonging, academic self-efficacy, and prosocial goals and values have historically been rather elusive as scholars explore their nuances and the many ways in which they can be taught and effectively measured. What was once thought to be fixed, neuroscience research is demonstrating as quite malleable (Zelazo *et al.*, 2016). And yet, it appears we have only begun to scratch the surface of what is possible.

What we are understanding from neuroscience research is that the students' ability to demonstrate crystallized intelligence (e.g. facts) and fluid intelligence (e.g. executive functions, inter- and intra-personal skills) are indeed intertwined (Zelazo *et al.*, 2016; Bresciani Ludvik, 2016). We do not know for sure how much we need to develop fluid intelligence skills sets so that crystallized intelligence is utilized within context and done so accurately and effectively. What is apparent is that, as educators, we need to ensure that our students have opportunities to learn and demonstrate adequate ability in both areas. Intertwined as crystallized and fluid intelligence appear to be, many of us continue to design the learning and development opportunities for students to acquire crystallized and fluid intelligence separately or ignore fluid intelligence acquisition all together. Could that be why there is a lack of evidence to share with stakeholders who hold us accountable for high-quality student learning and development, which includes inter- and intra-personal skills?

In this issue, you will read about some very specific ways in which some of these inter- and intra-personal skills are being nurtured and measured. Theses skill sets particularly that of pro-sociality – referred within as compassion – along with other skill sets are introduced in the following manuscripts in various ways. To cover all of the skills that employers are requesting more evidence of would require additional special issues (Organisation of Economic Cooperation and Development, 2013; Hart Research Associates, 2013). As such, we invite you to explore the following questions as you read these manuscripts and consider how applicable their findings and recommendations are to your role within your organization:

- (1) Which of these skills (or learning and development outcomes) align with our organizational values?
- (2) How might we explore whether and in what ways we are providing our students with opportunities to learn and then demonstrate these skill sets?



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- (3) How might we apply the findings and recommendations published within this issue to our organization?
 - (4) With whom would I need to collaborate to pilot some of these approaches?
 - (5) With whom do I need to collaborate to gather evidence of the pilot's success or failure?
 - (6) How might I want to share with *JRIT&L* what we discovered from adopting and adapting what we found in this special issue or submit for publication our innovative work?

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Following your read of this issue, we would appreciate hearing from you about what was of interest and what you found innovative and perhaps even inspiring. We do hope you find this issue useful to your own practice. If so, please let us know how it was. Enjoy!

Marilee Bresciani Ludvik

ARPE, San Diego State University, San Diego, California, USA

References

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