

## Dr. Brent Davis: 2021 Keynote Speaker

### Biography



Brent Davis's research is focused on the educational relevance of recent developments in the cognitive and complexity sciences. He has published books and articles in the areas of mathematics learning and teaching, curriculum theory, teacher education, epistemology, and action research. The principal foci of his research are teachers' disciplinary knowledge of mathematics and the sorts of structures and experiences that might support mathematics learning among teachers. He has authored or co-authored five books and his scholarly writings have appeared in *Science*, *Harvard Educational Review*, *Journal for Research in Mathematics Education*, and other leading journals.

### Abstract – Evolving Learning and Teaching

There are hundreds, and perhaps thousands, of “theories of learning” at play in the field of education. How can that be?

Some likely reasons can be gleaned from quick reviews of just a few of the more prominent discourses: Self-described theories of learning tend to part company around such consequential matters as the how “learning” happens, what a “learner” is, or what a “theory” should do. Cutting to the chase, rather than enriching the discussion, extreme ranges of interpretation seem to be preventing meaningful debate while undermining both formal education and educational research.

I talk about two unfolding projects that are aimed at coming to terms with these matters. Both are informed by Conceptual Metaphor Theory, a branch of the cognitive sciences, and Network Theory, a branch of the complexity sciences. The first of these projects, *Discourses on Learning in Education* (<https://learningdiscourses.com>), is an attempt to “map” contemporary treatments of learning – whether implicit or explicit, written or spoken, descriptive or prescriptive, formal or informal, scientific or folk. The second,

Metaphors of Learning in Education (<https://learningmetaphors.com>), involves comparing and contrasting the grounding metaphors for the most prominent word(s) for “learning,” across as many languages as possible. Both projects are oriented by the realization that, while there are many hundreds of “theories of learning” in modern education, there is only a handful of distinct metaphors of learning at play.

Readings:

- Brent Davis (2017): On the many metaphors of learning ... and their associated educational frames, *Journal of Curriculum Studies*, <https://doi.org/10.1080/00220272.2017.1330423>