

## Implications of Learning With Technology

Welcome to the third edition of this book. Each edition, including this one, is based on the assumption that meaningful learning requires active engagement in authentic learning tasks, articulation and reflection on personally and socially constructed meaning, collaboration in those tasks whenever possible, and most importantly, an intention to learn. This assumption is grounded in a constructivist epistemology. Constructivism is a philosophy for describing processes of meaning making. Although it is a philosophy that is relatively new to educational practice, it has always existed. Since the beginning humans have interacted with the world and struggled to make sense out of what they have experienced. This is as natural to humans as breathing and explains why we have a relatively large cerebral cortex. People naturally construct their own meaning for experiences. Unfortunately, that is a problem in the industrial model of education, where learners are evaluated by high-stakes tests for learning the same thing. Regardless of what we teach students or the experiences they have, they will naturally construct their own interpretations of those experiences. They may learn what we teach them, but what they will remember and use in the future are their own personal and social relevant interpretations.

Like the first two editions, the purpose of this edition is to demonstrate ways that technology can be used to engage and support meaningful learning. However, the structure and treatment of the learning process in this edition are quite different from the previous editions. This edition is organized around learning processes, such as investigating, exploring, writing, modeling, community building, communicating, designing, visualizing, and assessing. That is, in each chapter, we describe how different technologies can be used to engage and support the learning processes stated above. The chapters describe the learning-with-technology processes conceptually. In most examples, we discuss specific software applications. It is likely that you may not have access to these specific applications, or that they are not compatible with your computer. If that is the case, read Chapter 2, *Investigating With Technologies*, and use those ideas to find similar applications that you may be able to use. We focus on how to use technologies to engage meaningful learning, not on cookbook lessons that you can apply tomorrow morning. If we took that approach (providing specific lesson plans), they probably would not work the way that