

## A proven model for knowledge creation, accumulation, and sharing that allows, encourages, and supports students in small groups to be active contributors in meaningful learning activities.

Knowledge Building (KB), based on over two decades of research, is a technology-driven pedagogy that induces motivation to learning. KB teaching improves learners' higher order thinking (such as *critical thinking* and *problem-solving*) and fosters personal and skill development (such as *communication*, *interpersonal skills* and *lifelong learning attitudes*) within collaborative learning environments. These constitute critical 21st Century skills students need to master in order to achieve success in their studies and as innovative thinkers, and later in life, as productive workers and informed citizens living and working in a global, knowledge-based society.

The KB model is a technology-based solution leading to successful strategies that utilize ICTs for teaching, learning, assessment and parental involvement in education. Knowledge Building involves creative, sustained work with **IDEAS** where the overarching objective is to work collaboratively to improve those ideas. Additionally, KB extends the frontiers of the **group's** knowledge – also referred to as public knowledge – as opposed to traditional learning directed toward increasing an **individual's** knowledge. Knowledge Building is the deliberate effort to increase “cultural capital”, forms of knowledge, skills, education, and advantages that give people a higher status in society, and focuses on the creation of new knowledge. KB promotes deeper learning, guided discovery, project-based learning, communities of learners, communities of practice and anchored instruction. The KB collaborative learning environment calls for community discourse (small group discussion) to advance knowledge on shared problems of understanding. In essence, students work in small groups to advance the knowledge of the community (student group) as a whole. An advanced summary of the discourse, or “rise above”, is only achieved when all members of the group contribute to building the knowledge around the given subject or theme. The role of the teacher is of utmost importance in knowledge building classrooms, where a shift toward the use of ICTs does not obviate the need for teachers to serve as facilitators, leaders, and motivators. KB does not purport to replace the teacher in the classroom, but rather enhances traditional teacher leadership skills and practices, especially those related to lesson planning, preparation and follow-up, and maintain their importance in the KB classroom.

### What is *LEARNING*?

Learning is an *internal* and *individual* process geared towards producing changes in belief or attitude.

“Learning-by-doing” is similar if the goal is to improve an *individual's* skill at a particular task, performance, or competence.

Most school-based practice focuses on learning.

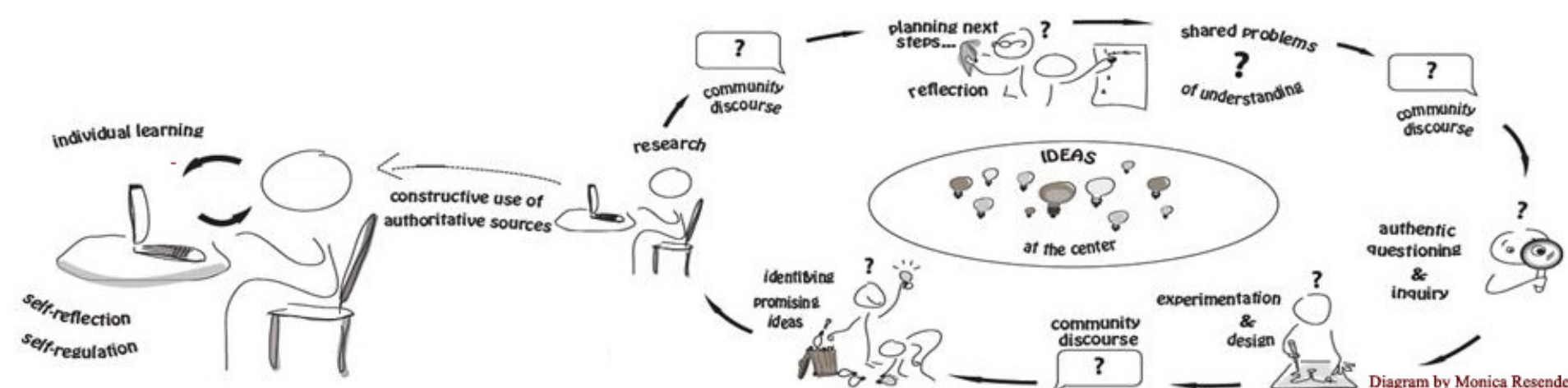


### How is *KNOWLEDGE BUILDING* different?

Knowledge Building (KB) involves *creative, sustained work* with *ideas*.

The overarching objective is to work collaboratively to improve those ideas, and to extend the frontiers of public knowledge.

KB work focuses on knowledge that “lives in the world” and can be modified and extended by others. KB calls for community discourse to advance knowledge on shared problems of understanding.



### KNOWLEDGE BUILDING PRINCIPLES

- ▶ Real Ideas, Authentic Problems
- ▶ Improvable Ideas
- ▶ Idea Diversity
- ▶ Epistemic Agency
- ▶ Community Knowledge, Collective Responsibility
- ▶ Democratizing Knowledge
- ▶ Symmetric Knowledge Advance
- ▶ Pervasive Knowledge Building
- ▶ Constructive Uses of Authoritative Sources
- ▶ Knowledge Building Discourse
- ▶ Embedded, Concurrent and Transformative Assessment
- ▶ Rise Above (Advanced Summary)

Scardamalia, 2002