

Overview of our learning approach

Needs:

- The skills needed in our vastly complicated world, whether to earn a decent living or to be an active and informed citizen, are radically different from those required historically.
- simply, the world has changed, and our systems remain stuck in time. “Knowledge workers” have become obsolete.

What the world demands today are “**smart creatives**,” the term that Eric Schmidt and Jonathan Rosenberg use to describe the kind of people Google needs to hire in their book *How Google Works*... Wagner, Tony; Dintersmith, Ted (2015-08-18). *Most Likely to Succeed: Preparing Our Kids for the Innovation Era* .

We are still using the same method we did 100 years ago

We need to provide an education that interests our students and gets them deeply engaged in their own learning, and that teaches all of our students what they need to be successful in their 21st-century lives.

To change, that is, both how we teach and what we teach, in ways that reflect our current and future realities. Changing the “how” means creating a pedagogy that works for today’s students. Changing the “what” means creating a curriculum that is future-oriented and engaging to today’s students, while remaining useful and rigorous.

How to Teach – Changing Our Pedagogy to “Partnering” We need to move from the teacher talking and the students taking notes. (“My teachers just talk and talk and talk” is by far the students’ biggest complaint about school.) In partnering, the **students do what they do** – or can do – best, which is finding information, using technology and other resources, and creating. **The teachers do what they do best**, which is asking the right questions, ensuring quality and rigor, vetting, and adding context and appropriate scaffolding

In the current system – or at least the public portion, which is most of it – there is an **almost total lack of curricular emphasis on character**, i.e., becoming a good person in addition to a good student • People need to feel successful and do it with community • Communication and Problem Solving • Character and Passion • Empathy • Ethics • Values

Learning Strategies: (Project Based Learning)

It is important to give learners the time and opportunity to talk about thinking processes, to make their own thought processes more explicit, to reflect on their strategies and thus gain more self-control. Acquiring and using meta-cognitive skills has emerged as a powerful idea for promoting a thinking skills curriculum ... *Carol McGuinness (1999) Create your thinking strategies*

- Look to make your approach more efficient.
- Look at issues from a system view with inputs, outputs, processes and feedback.
- Think of strategies in “gathering, organizing, analyzing and making conclusions.



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- Break problems into small chunks and study them well.
- Begin with the things that are simplest to understand and move to the more complex.
- Never to accept anything as true that you do not clearly know.
- Be complete in both your work and reviews that nothing is omitted.

Descartes, Discourse on Methods

The Future of Work Requires Non-Technical Expertise MIT Business school

Major elements	Flow diagram
<ul style="list-style-type: none"> • Learning about yourself /SEL/ Your Goals • Mindset -Thinking; Growth, Ownership, Engineering, • Teamwork/Communication • Business Tools/Soft skills • Analyzing issues... Root cause • Questioning • Problem solving • Testing/Reflecting • Reporting to community • Monthly follow-ups <div data-bbox="219 1266 776 1667" data-label="Diagram"> <p>Problem Solving</p> <ul style="list-style-type: none"> • Problem Framing • Requirements • Many Designs • Pick a few Solutions • Testing/ Feedback • Reporting <p>Divergent / Convergent thinking</p> <p>Iterative process</p> <p>Mark Somerville ... Olin College</p> <p>EngineeringLens</p> </div>	<div data-bbox="954 646 1372 1491" data-label="Diagram"> <pre> graph TD Start([Start]) --> A[Learning about yourself Icebreaker] A --> B[Creating the Team (Forming Community)] B --> C[Business Tools Life-Skills] C --> D[Problem Selection] D --> E[Possible Solutions] E --> F[Testing & Reporting] F --> G[Follow-up Sessions] G --> END([END]) F --> D </pre> </div> <div data-bbox="1003 1549 1328 1801" data-label="Image"> </div>

