

10 DESIGN SHIFTS THAT BUILD



1

No More “One-and-Done

The conventional curriculum planning process encourages teachers to assign certain topics or concepts to a single unit or project, and to require that students master them by the end of it. Unfortunately, this linear sequencing violates cognitive science research. Concepts, much like skills, must be practiced and transferred to different contexts. The development of meaningful understandings happens over longer time frames than a single unit or project affords.

2

Remove High-stakes & Summative Assessments

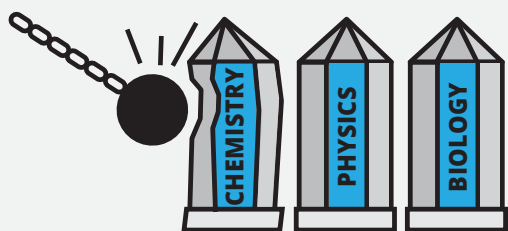
The high-stakes and summative assessments that are built into conventional high school units & projects are tied to the one-and-done curricular structure. Once we end one-and-done, these anxiety-provoking, time-wasting episodes are unnecessary. Students can incrementally build readiness for rigorous, multi-day assessments that are not high-stakes. This can happen when we decouple mastery from end-of-unit time frames and eliminate midterms & final exams.



3

Break Down Silos

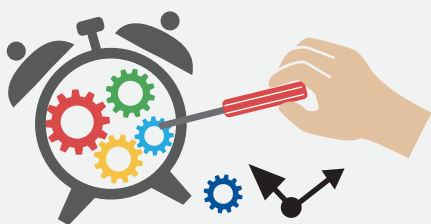
Real-world problem solving is transdisciplinary, particularly as we grapple with complex, interdependent systems like those framed by the UN Sustainable Development Goals (SDGs). Universities and researchers are breaking down silos to co-create new methodologies & technologies. Adolescent brains are primed for hyper-connected, multi-modal learning. And did you know that making novel connections is a key ingredient for creativity?



4

Use Disciplinary Program Time Differently

Creativity also is fostered through long periods of incubation and deep conceptual understanding. By committing to the first 3 design shifts, we can consider four years of departmental programming very differently—certainly outside of their siloed, single-year courses. We have determined that competency-based assessment systems work best, and produce more precise learner profiles, when discrete competencies remain stable over multi-year sequences.



5

Ensonce Content in the Information Age

Lifelong learning requires ongoing skills practice, ongoing concept building, and a willingness to move forward in uncertain environments. When we accept that technology, pedagogy, cognitive science research and disciplinary knowledge will change, education resources can be truly "open" to the Information Age and evolve alongside it. We found that the best designs are those that force the content to change incrementally and relentlessly.



OPEN LEARNING ARCHITECTURE

6

Restructure PBL

PBL often faces curricular barriers in upper school core curricular classes that also need to meet state course requirements. And we believe that teenagers should be leading their own projects, without the constraints of class timelines. So PBL in class focuses on the how: the practices, protocols, skills & conceptual understanding that are assessed by stable competencies over multiple years. Some electives are replaced with project time, when students decide their why and what. And class time has equipped them for more autonomous work.



7

Establish Expectations for Co-creation

In our Sustainable Open Education Resources model, students, teachers and designers collaborate through clear roles that make the student-centered classroom experience work more smoothly. To achieve disciplinary literacy, students must learn to produce content rather than merely digest it. Teachers guide students through constructive feedback, by building constructive relationships, and by offering just-in-time assistance. Designers maintain materials, acting like a back office staff for classrooms. All three partners have full-time jobs! Clear roles make the collective work sustainable and build resilience of the system as a whole.



8

Make All Technology Assistive

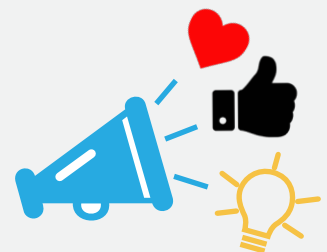
By building clearly defined instruction, assessment and content models first, we were able to place technology in its rightful role: as a learning accomplice. When tech is used intentionally, the right tools are used at just-right moments, and are used regularly enough for students to develop proficiency. Productivity, creativity, inclusive, authentic STEM & educational tech are all in the mix. Further, our open architecture allows schools to pilot new tech tools along curricular 'threads' that we help them place temporarily, so classrooms can test tools to inform adoption decisions.



9

Embed SEL Into System Mechanics

Academic systems convey strong messages to students about what success looks like, what doesn't count, who succeeds, and when effort is futile. While advisories and mindfulness practice are supports, student wellness will not be realized until academic systems are structured to elicit healthy learning behaviors. When 'learning the system' is not about learning, it's time to re-engineer system mechanics, don't you think?



10

Apply Circular Economy Principles

By applying Circular Economy principles to education, we can maintain stable academic systems through repair, refurbishment, and replacement. Maintenance is a reality for digital content as well as the hardware & software that deliver it. And teacher PD should progress in steps rather than leaps, within functional curricular models that aren't thrown out with every new set of standards. Keeping costs low while maintaining high value is paramount.

