The contemporary politics of education cannot produce Learning 2.0. The problem is not—as many who call themselves “reformers” allege—with education interest groups. Politics is always full of interest groups, and some of the loudest reformers are reaping generous personal benefits. The problem is that the system is focused on the wrong things.

For most of the last four decades, the interest groups in public education have battled over mandates and regulations: increasingly fine grained rules about who gets paid for what and what paperwork needs to be delivered as evidence of performance. Those same interests need to focus on changing the design of the system and increasing its capacity.

Consider three policy levers. First, create and use the capacity to design learning using 21st Century information tools. Rather than designing "one best system" as the developers of the early 20th Century learning model sought to do, adopt the notion of continuous improvement and redesign, what Google calls "permanent Beta testing." Do not assume that California can move from early 20th Century learning to Learning 2.0 by adopting a new textbook series, by cabling schools, or selling them tablet computers by the truckload. Do not assume that "best practices" can be distilled into an educational pill for all to swallow.

Public policy in California has established two potential education laboratories recently. They should be better used, and there is an older experimental tradition that should be revived. Charter schools, in their original intention, were supposed to be Petri dishes of innovations that would be transferred to district-run schools. Pilot schools, which are essentially in-district charters, are being spawned in the Los Angeles Unified School District and could work elsewhere as autonomous schools where teachers and educators remain district employees. They have a similar experimental capacity, and each goes through an explicit design phase before being approved. An older, largely abandoned, tradition of university-based laboratory schools could also become developers of Learning 2.0. The state should treat charters and pilot schools as laboratories of learning rather than experiments in governance. Those experiments should be explicit, a part of the design and application process for such schools. The requirement for pedagogical experimentation should apply particularly to statewide-benefit charters, those which are granted the ability to work across school district boundaries. And the state should top-up charter school funding to allow careful documentation. Universities should be able to modify their teacher and administrator education programs to incorporate laboratory schools, and should get added support to do so.

Second, carefully deregulate. In many ways charter school law discriminates against existing school districts, making it easy for charters to be innovative while failing to scrape four decades of regulatory barnacles from the hull of district-run schools. Gov. Jerry Brown promised deregulation in his education platform. In addition to fiscal flexibility, he and the state school board should foster the ability to blend education technology into district-run schools. The most important change involves moving toward a system where student progress can be based on mastery of a subject rather than the number of days and minutes that a student's bottom was attached to a school seat. Some blending of attendance-based financing and achievement
incentive would spur new forms of learning. In addition, Learning 2.0 involves many changes in work rules. Blended learning or the organization of learning in ways other than traditional classes obsolesces standard class size limitations, indeed the whole definition of a class. Monitoring online instruction probably doesn’t require the skill set of a certified teacher. We don’t yet know all the contours of a teacher’s job in this new environment, much less what’s fair and just. We do know that getting from here to there will require a lot more flexibility and experimentation than the current system generally provides. Either through legislation or a statewide teacher contract, the state needs to open up space for experiments within school districts. The unions resist these changes at their own peril. Historically, unions have not fared well when the basic technology of work changes. In California’s at least semi-friendly political environment, teacher unions have the chance to get ahead of the curve of teaching and learning innovation. If they fail, and most pedagogical innovation takes place outside of the realm of district-run unionized teachers, the attractiveness of these schools as workplaces is likely to diminish rapidly along with the size of the unionized sector of public education.

Third, invest in a learning infrastructure for students. Think of it as a combination of Facebook for school, the best computer game you ever saw, and a smart app for your mind. By thinking of the student as the end-user rather than designing educational products that will be attractive to a textbook adoption committee, the state can vastly open up learning to new participants, approaches, and ideas. Consider the Kahn Academy for a moment, the singular creation of Sal Kahn using off-the-shelf software and retail technology. Its web site now contains over 1,800 math lessons (mostly) and has had over 10-million visitors. (One school district in the Bay Area is experimenting with using it as part of its math curriculum) Consider the burgeoning open-source courseware movement first centered at MIT and Carnegie Mellon and now spread around the world with scores of additions each week. The state does not need to create a single learning utility, a power grid for learning. These are already springing up, and district schools and charters are testing adopting them. Consider Moodle, the open-source classroom and lesson management system that is being used by school districts throughout the state and the California State University system. With tens of thousands of users, a wealth of adaptation is already taking place. (As a current events note: the American School in Libya, whose building is closed by the revolution, is holding its classes on Moodle) Although there does not need to be a single learning utility to which all students and schools subscribe, there does need to be a network of learning utilities, the pedagogical and intellectual equivalent of common grazing land. The state has a very strong public interest in preserving the open-source commons and not outsourcing the intellectual and pedagogical core of its educational system.

Learning 2.0’s commons-based, peer-to-peer collaboration is a powerful new production system that takes advantage of the Internet’s technical and networking capacity. Its means of production is starkly different from that of the existing information industrial economy. In Learning 1.0, the long-standing practice of purchasing textbooks and educational materials from vendors morphed into buying programs of instruction and whole school designs. Education followed the mid-20th Century information economy model that applied to newspapers and television stations: scarce expertise and high fixed costs. Only a few people had the ability or the capital. Thus, the textbook and instructional materials oligopoly came into being, the educational equivalent of the “military-industrial complex” that Dwight Eisenhower warned us about. Learning 2.0 turns that older production system on its head.

It is particularly important to protect the commons as a way to develop and benefit from the knowledge of teachers. Proprietary software developers and the retooled textbook companies are intent on delivering complete integrated programs that are easy for school districts to adopt, but which lock them into the tender mercies of vendors. In contrast, most open-source learning systems and the platforms for developing applications are adaptable by teachers and often by students. This commons-based peer-to-peer production system is an integral part of Learning 2.0, both its pedagogy and its economy. Politics will have to sort this out.

However, I believe that the existing interest groups are forming battle lines in the wrong places, primarily around the regulations regarding technology use.
The more fundamental educational design decision concerns who builds Learning 2.0? At issue is whether teachers and school administrators are to be cast primarily as industrial era factory workers, whose job it is to oversee the flow of externally created learning technology; or are they primarily educational artisans and craft workers, whose job it is to choose among available tools, adapt them to specific needs, and build new ones. Protecting the commons means public funding of computer access. It means including time in teacher work weeks for their participation. It means developing technology that teachers actually want to use. It means incentivizing those teachers who are leaders in development.

The state also forwards its interests by creating design standards, in the same way that Apple creates standards for the applications one can buy for its phones and tablet devices. By creating design standards and learning modules, the state will allow teachers and many others to combine bits and pieces of instruction and teaching ideas from different sources and prevent the vendor’s monopolistic practice of creating what is called coherence as a way of increasing market share.

This is the pathway to Learning 2.0.