

Conclusion: Will online learning *Disrupt Class*?

One of the notable online learning developments of the past year was the publication of the book *Disrupting Class*.¹⁷ The book's lead author, Clayton Christensen, is neither a K-12 teacher nor education administrator. Instead, he is a professor of business administration at Harvard Business School, and has written about innovation and managing change in numerous business-related fields.

Christensen's analysis of the American education landscape starts by applying the same techniques to education that he has used in other sectors of the economy. He makes several points that are shared by many critics of education, and goes on to make some startling predictions. His observations include:

- **Contrary to the common view that schools have changed little in the past century, in fact they have changed in very substantial ways.** However, what they have been asked to do has constantly evolved, so schools appear never to have reached their goals.
- **In seeking to improve achievement of US students, enhancing and building upon students' intrinsic motivation is a key area in which schools can excel.** Christensen believes student achievement is lagging due to factors both within and beyond schools' control.
- **Customizing learning to the student is a key factor in making education intrinsically motivating for students.** Although students have different learning styles and learn in one or a few of many different ways, most schools today are not able to customize learning or to take a student-centric approach, but instead teach from a monolithic, one-size-fits-all method.
- **Schools' use of technology has had limited benefits,** at best, despite the \$60 billion that has been spent on educational technology in the past two decades. The reason is that the technology has been "crammed into" existing teaching structures, instead of developing into a new model of teaching.
- **Education has avoided disruptive influences that force fields to evolve and change.** Research from other fields suggests that innovations have large, disruptive effects not when they are placed into existing structures, but when they operate outside of usual channels. One way in which this can happen is when the new product or service based on innovation is initially directed toward non-consumers and competes against "non-consumption"—in other words, meets a need that is not being met and may not even have been yet identified. For example, Apple built its first personal computers for students, not typical business users.

¹⁷ Christensen, Clayton M., Curtis W. Johnson, and Michael B. Horn, *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*, (McGraw-Hill, 2008)

The non-consumption space allows the new approach to grow outside the usual constraints and parameters, because it does not initially need to meet all the features, functionality and quality assurance of the established products. The new method has an unconstrained place to grow and flourish to the point where it then can compete with the old method of operating. The competition eventually leads to the new technology-based product or service becoming dominant.

- **Online learning as it is being implemented today is often replacing non-consumption.** Online learning has established its value by filling voids that school districts cannot, or prefer not to, address such as the lack of access to courses, lack of highly qualified teachers, or inability of students to work within the prescribed school schedule. One example is the online Advanced Placement courses that are being offered to students in schools that previously did not offer AP courses. The online courses are not competing directly with AP courses to which students had access; these students often have the choice of an online AP physics course, or no course at all. Similarly, full-time online schools offer a public school option in the home for parents and students who are unable, or choose not, to attend a brick and mortar public school.

Based on these observations in education, and applying his findings from the adoption of technologies in other fields, Christensen suggests that significant change is happening already and that online learning is in the early stages of a very steep adoption curve. He believes that the current monolithic, one-size-fits-all educational model is being disrupted, and will eventually result in a student-centric educational system. A critical tool in making the transition to the student-centric model is online courses, and in the most startling prediction in the book, Christensen suggests that by 2019 about half of all high school courses will be online. However, it is not clear exactly what type of online course he has in mind. It seems that he is not referring to the type of online courses and virtual schools which are primarily in existence now, but rather customizable, modularized online instructional units created by and for students, parents, and educators, perhaps with less teacher involvement than most online courses today.

The book seems to suggest that this future growth is simply based on existing numbers and previous rates of growth, and that it is almost a foregone conclusion. But Christensen goes on to suggest that a key element of making this change happen is that “each school should have one person—and over time an organization reporting to that person—whose sole job is to implement online courses... this person should have broad autonomy and report directly to the principal or district superintendent...should be free to take whatever steps are necessary to bring in online courses to help the children in the school have access to and find the classes they need... This very well might look like a school within a school...”

Do the changes now occurring in online learning appear to support the book’s predictions?

One weakness in the model that the book uses to predict change is that it is based on a variety of fields that are relatively free markets in which the consumer makes the purchase decision, compared to public education where the same situation does not exist. In most situations in education, the ability of students and parents to direct their public education funds (as opposed to any funds they might pay out of their own pockets) is limited, because the state is making the funding decisions, and school districts are making the purchase decisions. In many cases today, students and parents have to convince school boards, superintendents, and/or state legislators that online learning options are legitimate. This

is clearly a higher barrier than existed for the consumer in the middle of the last century who gravitated to the portability and convenience of the new transistor radio instead of the sound quality and tradition of the existing radio (to use an example from the book).

Online learning has the capacity to grow, and the early results demonstrate the benefits of students and parents being given the choice of a variety of learning options, from fully online courses at a distance, to classroom-based courses, with blended learning options in between. However, it is not at all clear that online learning will grow in the organic way that the book suggests, or that it will really have the power to change education as we know it — that it will actually end up *Disrupting Class*. In many states today—despite the rapid growth so far—a real or potential barrier exists for students who seek an online course. These barriers are sometimes on the student side (related to access to online courses or the willingness of their school to grant credit for online courses they do take), or on the school side (related to funding or other limiting policies). There are additional barriers that will impede the model of customizable, modularized online learning that Christensen describes as necessary for student-centric instruction: the tremendous amount of funding that Christensen admits will be needed to bring online courses to that level; research into the outcomes achieved with such content; standards for these new courses; and professional development for teachers using a new student-centric instructional approach.

Several important recommendations are given near the end of the book. The first is “[D]on’t kill the disruption by having online programs strip away funds from districts or compete as whole schools directly *against* the existing system.” Funding is clearly one of the keys to the growth of online learning—perhaps the most important single factor. Christensen’s suggestion that online learning be funded without stripping away funds from districts sounds good, but it may be naive.

The simple fact, as legislators repeat time and again, is that all government-funded programs are competing against one another for taxpayer dollars.¹⁸ We live in a world of limited resources. As optimistic as it sounds to say “fund online learning so that it doesn’t compete with traditional education,” the reality is that online learning programs are either competing *within* education budgets against other forms of public education, or they are competing *outside of* education budgets against everything else that the state is paying for.

Full-time online programs are usually funded by the state’s public education funding formula. There is competition between online schools and physical schools for education dollars that are allocated by education funding formulas, resulting (in most states) in the reduction of funds to the districts that lose students to full-time online schools. (The district also sheds at least some of the expense of educating those students, of course.) State-led supplemental online programs usually are not funded by the state’s education funding formula. Whether these programs are seen as competing against education dollars, or against non-education dollars, varies by state.

In addition to funding, one of the challenges in developing online learning policy is that the term “online learning” has different meanings for different people. Different online learning courses and programs can have very different levels of teacher involvement, computer technology (such as diagnostic assessments), real-time and asynchronous interaction, and face-to-face elements. *Disrupting Class* takes this level of variation a step

¹⁸ This is especially true of education because education is funded primarily by state budgets, which unlike the federal budget often must be balanced within relatively short time frames. In the U.S. Congress funding debates happen in the abstract, because in the time frame that programs operate the federal budget is open to growth, constrained by politics but not by a hard budget cap. In state budgets there is typically a hard cap, and legislators’ wish lists of programs to fund invariably outstrip the available funds.

further, envisioning a world in which online learning entails networks of users (students, parents, and teachers), using modular content that they mix, match, and plug in to fit the various needs of students. This vision is so different than most online schools today that it raises the question of whether today's online schools will be seen as the pioneers of a whole new way of teaching and learning, or as the precursors to an entirely new wave of education.

Even though we don't know whether online learning will eventually match the vision in the book, we do know that it will continue to evolve rapidly if given the room to do so. A second key recommendation in the book is "Don't place artificial limits on what students can take online or what teachers can build online either; if they need access to a class or want to create content and lessons, let them do what they need to do, what they want, and what works best for them." We suggest that this statement should be taken a step further—not only should new artificial limits not be put into place, but the existing artificial limits should be removed. This would entail:

- Ensuring that students and parents are free to choose online courses and schools.
- Encouraging schools of education to incorporate online instruction as part of the curriculum for future teachers, to include pre-service training in teaching online, and creating additional professional development options for certified teachers.
- Allowing teachers to teach across state lines by encouraging reciprocity of recognition of teaching credentials.
- Creating true national content standards so online content does not need to demonstrate alignment with countless different content frameworks.
- Revising accounting standards for funding to get away from count dates, seat time, and other measures that don't apply to the online environment.
- Establishing some standard metrics for basic quality assurance and measurements, such as consistent measures for course completions, etc.

Online learning is growing so rapidly that the possibility that half of all high school courses will be online in little more than a decade is plausible. But that outcome is not likely to happen simply due to momentum, or because technological changes in other fields produced a similar rate of change. It will, instead, require specific policy and funding changes, including and in addition to those suggested above. These policy changes should focus on increasing high-quality online educational choices and opportunities. We believe that students and parents will recognize the value of true student-centric learning, whether it is fully online or a blend of online and face-to-face, and through their millions of individual choices transform education.