

At the Core of the Apple Store: Images of Next Generation Learning

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It's a good half-hour before the Apple Store at the local mall opens, yet a small, motley group is already queued up outside the door. No, these folks are not stalking the iPhone. That is no longer necessary now that Apple has increased supply, and the current state of the economy has reduced demand. These early arrivals have a different mission, with their laptops, iPods, and iPhones tucked under their arms—one has even brought his desktop with him, keyboard and all. Their intent is not to buy but to address some vexing challenge they are having with their computers, to learn about an application they can add to their repertoire, or just to explore a curiosity or interest. Apple, nevertheless, hopes they end up buying.

We help to create highly innovative schools in large cities throughout the United States and around the world, so we are constantly on the lookout for alternative designs for learning.¹ This is why the Apple Store caught our attention. A few of our staff members had visited an Apple Store and were intrigued by what they saw and experienced. What's going on here, we asked? Have the Apple folks created an innovative approach to learning *as well* as to technical support and retailing?

Yogi Berra, considered by some as the patron saint of anthropologists, has counseled, "You can observe a lot by just watching." So, in our quest to understand what makes the Apple Store tick, and armed with a list of questions and observation guides, our intrepid Big Picture Learning team descended on an Apple Store at a San Diego mall.

After several visits to several stores throughout the country, we think we understand a bit about what's at the core of the Apple Store. Moreover, we have concluded that what goes on there is a harbinger of what some, if not many, learning opportunities might look like in the 21st century, wherever they might take place. This article is about what we found, what we think about what we found, and how every learner and anyone who considers himself a teacher (that's just about all of us, right?) might want to think about it as well. There is a lot to learn about learning just by watching what goes on in an Apple Store.

¹ Big Picture Learning (www.bigpicture.org) is a nonprofit organization that develops schools—about seventy of them since 1995 in about fifteen large cities across the country and internationally—that educate "one student at a time within a community of learners."

A Look Inside the Apple Store

The typical Apple Store has three general areas: one for play, one for purchasing, and one for learning. The customer typically encounters these areas in that order.²

The play area is an uncluttered shrine to objects that invite play. Of course, all of the objects—iPhones, iPods, and MAC computers, even the accessories—are cool, must-haves for almost everyone over the age of two. This is a high-touch area; it's very difficult to break anything, although we did notice that there were a few young people who appeared to be working especially hard to do just that. Staff members linger nearby to answer questions, demonstrate a new application and, we suspect, to prevent the high touch from becoming too heavy.

Here is a space for just messing around, playing with the new products, and, of course, thinking about what you want to take home. This latter rumination is no minor consideration, because Apple products sell at a premium to most other brands. Many feel such a premium is justified by what they consider superior hardware and software, if not by the cachet.

Moving further into the store, customers encounter “shrink wrap land,” with lots of things to buy hanging on the walls or sitting on shelves. Here, also, Apple staff members are near at hand, ready to answer customers' questions and help with a purchase. In this area particularly, staff members serve as mobile checkout counters, with digital cash registers hanging from their hips.

At the back of the store, customers encounter The Studio, an area devoted to one-on-one and small group instruction about all Apple products and software applications. Seminars are scheduled regularly, but much of what goes on here appears to be *ad hoc* and customized for whomever signs up. The Studio operates much like a seminar or workshop.

Also at the back of the store is the Genius Bar, the store's inner sanctum and another unique feature of the Apple Store design. There are no products to buy here, but many services are available, most for free and focused on learning. This space is for problem solving and troubleshooting—a qualitatively different kind of messing around than what goes on in the play area. At the Genius Bar customers receive personalized technical assistance in addressing just about any problem. At least one staff member, designated the “Concierge,” patrols this area, inquiring about your needs, and helping you schedule an appointment to talk with a certified “Genius.”

Apple Store staff members are a key component of the entire experience. We talked at length with several during our visits, from the “greeters” at the front of the store to the Geniuses at the back. Most were young; there were few older folks among the staff. The predominant uniform was a brightly colored T-shirt with, what appeared to us older dudes, a bit of studied dishevelment. There were lots of smiles, and staffers were eager to talk about their experiences.

Staff members reported that they love the work and the place. Two Geniuses told us that it is harder to get a job at an Apple Store than it is at NASA. You and they know that's an

² We thought we knew exactly what the standard layout was, but learned on a visit to an Apple Store in Manhattan and later to a store in San Francisco that the three areas are not always configured exactly as we found them in San Diego, South Beach, or Providence.

exaggeration, but what is true is that they feel they are important and are proud of what they do. They realize that this job is coveted by their peers and “looks good on the resume.”

All staff members are themselves learners, some just a step or two beyond the average customer; others are whole ladders beyond, in “Genius” territory. Those we talked to said that they are provided with lots of on-the-job opportunities to enhance their own skills and knowledge. But they need to bring a passion and commitment that matches their skills. There is certainly an Apple Store career pathway, if that is desired.

Studio and Genius Bar staffers quickly assess a customer’s interests and technical abilities and adjust their helping approach accordingly. They are more tech savvy than most of their customers, but there is no condescension or thinly veiled disdain here, just good listening and empathy for the technically challenged. You wonder how Apple selects and trains staff to have just the right combination of persistent nerd and patient kindergarten teacher.

The Geniuses are “experts in all things Apple,” proud of their skills. After all, there is a lot to master here. Apple is, therefore, only a bit playful in naming these technology Yodas Geniuses. It recalls Arthur C. Clarke’s observation that any sufficiently advanced technology looks like magic. And that is exactly what the Apple Store Geniuses do—work their magic on your technology and you.

***Marilyn**, an Apple Store Genius, is a community college student who wants to start her own business. She’s been working at the Apple Store for less than a year but has used and loved Apple’s products “forever.” She is preparing for a career as an x-ray technician and hopes to be a radiologist and eventually own an MRI facility. She likes the environment and the action the Apple Store provides. She values the on-the-job training opportunities available to her. She has access to learning resources in the back room and to Apple’s virtual back room online. She also learns from her fellow Geniuses, and consults with them on particularly vexing issues or to check in with them on the latest information with respect to a particular application.*

As pervasive as the technology is, this is no store just for the technology savvy. The environment provides customers with multiple options and pathways for engaging their hands, minds, and, yes, hearts—typically through one-on-one experiences and learning opportunities that invite each and all to join the Apple community. We talked to a few customers during our several visits, but mostly we watched them and listened in on their conversations with the Apple staffers.

The customers are a diverse lot. Many are young, but we counted several older adults, even a few who were at and beyond retirement age. Most come with a variety of goals other than purchasing a product. Some come because something needs fixing, but many want to learn about what’s cool. They want to play and learn and imagine what they might own. They may have a question about how to use what they have already purchased more effectively. Some sign up for a seminar in The Studio, where they can join with others in small groups to learn about a specific application.

And nearly everyone, even those whose sole purpose is to visit the Genius Bar, stops in the play area to check out the latest equipment, software, or accessories. There is always something new and enticing motivating customers to stay current about the latest gadget.

The Apple Store Experience

We were particularly interested in the interactions between staff and customers in the Apple Store's setting, which invites high tech and high touch, allowing for a low-key, highly personalized, customer-controlled set of interactions that can escalate quickly from casual play to serious learning. Many customers, even staffers, give in to their own kind of "flow," simultaneously challenged and energized by the experience.

Regardless of age, gender, or class, all find something in the Apple Store. There is someone to listen, and there is something one can learn—for free. The customer has a sense of freedom, equity, and choice not necessarily experienced in other retail stores. Despite the ubiquitous technology, the Apple store experience is not about objects but about forming relationships with objects, reminding us of an old Apple ad: "The importance of technology is not technology."

Like the naturalist David Attenborough wannabe in the Geico commercial, we watched the interactions, looking for the teaching and learning moments that promote skill and understanding, leading a customer to say, "I can do this," or the ultimate "I want to do this."

In the play area, Apple staff members look for the right moment to step in, first to help or clarify, then to ask questions that identify needs (and wants and interests, of course) and then to demonstrate the "moves" —sometimes a bit quickly at first, but then more slowly accompanied by an explanation. Then they step back a bit to let the exploration resume. We observed this pattern of interaction on several occasions.

We also observed some powerful non-verbal communication in the way that staffers relate to their customers. Staffers in the play area demonstrated the equipment at the customer's side. Staffers at the Genius Bar often came around the counter to work side-by-side with the customer on the customer's computer. This experience reminded one of us of his first grade teacher beside his desk, guiding his hand to be sure that, in "carrying the 1," he put the number over the right column.

We were most intrigued by the services available in The Studio and The Genius Bar by merely signing up, illustrating Apple's catch phrase, "The support you need, when you need it." Customers have multiple pathways for learning and get a chance to demonstrate what they know—and don't know—with supportive observation by the resident Genius. Thinking and tinkering go hand in hand.

Of The Studio, the Apple literature says, "There is no better way to learn more, or learn it faster, than with one-to-one personal training sessions." Customers can "create a program that is customized to your level of experience" with "personal training sessions designed to move at your pace and provide the support and guidance you need, whether you are new to MAC or ready to master the latest pro software." Of their more technical support, Apple boasts of highly personalized and just-in-time learning through "same-day service at the Genius Bar."

We had an opportunity to observe a Studio session in which a woman in her early 30s seemed to be practically clueless about managing the scores of files scattered across her computer's desktop. The instructor paused the class lesson to treat the woman's situation as a learning opportunity and did an impromptu mini lesson on file management. Here also, the instructor asked the students to describe the problem, then helped with clarification and set up a customized lesson.

Over several visits, members of our Big Picture team observed a strong culture in play, one that embraces exploration, having fun, and getting deeply engaged in playing with the technology tools. Every effort is made to get the customers using the computers, iPods, and iPhones. It's a relaxed engagement, so it's easy to see how young people and practically anyone can get so intensively involved.

On another occasion, one of us visited the Apple Store with a toxic combination of hardware and software problems, providing us with yet another opportunity to watch a by now familiar scenario of listening, diagnosis, heuristic problem-solving, and then demonstration and modeling. Here, we noticed the facile way in which the resident Genius unpacked the various complications and addressed them almost too fast to follow – again, the magician's hands – causing us to ask for an instant replay, both in terms of the demonstration and an explanation about the performance. In this case, the Genius was ready to run through the entire process one more time and to suggest ways in which the problem could be avoided and/or addressed in the future.

The Genius Bar at the Apple Store has turned technicians into teachers, tutors, and therapists. Apple has elevated the technician to Genius level, whose job is not only to repair but also to teach and learn with and for customers. Unlike the Maytag repairman who sits by the phone alone and bored, Apple's Geniuses are in high demand and eager to listen, observe, and engage customers to understand what they are doing with their computers and what they want and need to do. The diagnosis and treatment are simultaneously technical and personal.

The language employed in this learning area is a mash up of high-tech and high-touch terminology drawn from the business sector: advance reservations, rapid repairs, priority support, consultation—just enough new lingo to distinguish Apple Store service and yet relate it to other, similar personal experiences. Each customer's story forms the basis for the learning experience, putting him in control of his own learning. The combination of personal agency and relationships to a community responds to who we all are as learners.

On another occasion, we watched Jamie of the Genius Bar work with a customer to address a vexing issue: syncing the customer's iPhone with his notebook computer. Jamie and the customer worked side by side. Looking at the computer screen, Jamie is at first puzzled by the problem. We could almost see the tumblers clicking as Jamie sifted through the options, much like a master chess player reviewing the several options. Then he talked with the customer about what might be causing the problem, about the ways he thought heuristically about the problem, and the way he reasoned his way through the options, finally arriving at the most likely solution, which in this case was the right one.

When he was sure it was working, he gave the customer a brief recap of what he had done and, should the problem recur, how to address it. We watched Jamie conduct his informal assessment: “Am I clear?” “Are you able to do this on your own?” “What more do I need to do or demonstrate?” “Are you interested in learning more?” In 20 minutes, the customer was packing up his computer, marveling at the “Genius at work,” but also feeling a bit more empowered to deal with the technology—and the next inevitable issue—on his own.

The customer did not just get his computer fixed; he was part of the fixing. The experience prepared him to think, learn, and perform like the Genius when confronted with a new challenge that requires him to define the problem, discover key information, understand and analyze the key issues, make connections, and devise and apply solutions.

What Can We Learn from the Apple Store as a Learning Environment?

Our several visits to several Stores gave us a sense of how learning, work, and play might be merged in a wide range of venues, including, of course, schools. Some may think it odd to regard a retail store as a learning place or community, and that just-in-time learning for fixing computers has no intellectual capital. But there is ample evidence that the Apple Store may be a prototypical learning environment, one in which an enterprising team of talented teachers could construct and implement a comprehensive and challenging learning program.

Yes, the Store is designed to sell, but it is also designed to teach. Apple’s culture—its knowledge and values—embraces learning and learners. Nearly half of the Store is devoted to playing and learning. Indeed, the play area up front shares a lot in common with a typical kindergarten classroom, the Studio with a graduate seminar, and the Genius Bar with a lab or apprenticeship. In its artfully designed store space, Apple merges products with services for a unique experience where the customer sees himself as a learner able to master valuable skills. By developing this type of agency, Apple has created a community and a culture. This is no longer just a store but a community center where people share a common story.

For Apple, an educated user is a profitable consumer, so the retail store experience is dedicated to education, training, and support. Through that experience, the customer gets to purchase the associated products, bring the Apple Store home in a box, and continue the learning relationship online with the Apple community.

Experienced educators know that the learning environment—the physical, psychological, cultural, social, and organizational elements—is as important as the learning opportunities themselves. More than any other company we can think of, Apple Store designers have followed that credo to such an extent that they have created and successfully scaled a learning environment devoted to these elements. More than a school, museum, or library, the space and experience allow anyone a chance to figure out what they need and, at the same time, a chance to browse and learn both intentionally and serendipitously. We surmise that even professionals with access to a traditional tech support system in their organizations might opt for the TLC provided by Apple staffers.

What are the essential features of the Store’s culture?

One customer at a time. The Apple Store learning experience is highly personalized and focused on the interests and needs of the individual customer. Although the technology may be intimidating, it is the learner who is in control of the learning experience. Just as in traditional schools, time is important in an Apple Store. But here, it's the customer as learner who owns the time and decides how it is allocated.

Risk-free problem solving. The Apple Store learning experience is based on an essential truth: most learning comes from messing around—the trial and error that leads to understanding and insight. Customers focus on problem solving and inquiry, and can make mistakes along the way, with little risk of failure or embarrassment. Thinking and tinkering with the help of a staff member provide an opportunity for deep learning.

Relevance. The Apple Store has built relevance into every nook and cranny of the customer's experience. Apple's staffers recognize that they must start with the customer and with whatever the customer knows. They can then build on that understanding to move the customer to a new level of competence.

Just as no two learners are alike, so also are no two computers alike, particularly because their owners customize them. Sometimes, therefore, when the computer “breaks,” the customization requires fixing, or the customizer requires learning. Either way, this is the ideal environment in which to move customers from uncertainty to mastery over their machines and their customization of them. Thus has Apple not only redefined the nature of the retail experience; it has redesigned the technical support experience as well.

Real-world rigor. We observe a different kind of rigor in the Apple Store experience—authentic and respected, embedded in the customer's learning and work. This is the kind of rigor that we find in challenging and rewarding work. It results from engaging in problem solving where the answers are not clear and the challenge is significant. This is not the rigor of traditional school learning.

Relationships, relevance, and rigor—a new 3 Rs—are integral to the design of the Store and the experience. The Apple Store takes the relationship between customer, staff members, and store to a new level of retailing and learning.

Authentic assessment. Assessment is built right into the learning, focusing specifically on what is needed to be learned/accomplished. The Genius checks to be sure that the learner has mastered the new skill and has acquired new understandings about the software application or the hardware. There is also plenty of *self*-assessment going on here: The customer's questions guide the learning and reveal what has been learned and what is left to be learned. No grades are needed; the experience and its outcomes are evident to both.

Expert teachers. Despite all of the teaching and learning going on in the Apple Store that is conducted by “teachers” without any formal teaching certificate, there have been no protests from teachers unions. This kind of teaching flies beneath the radar screen in true Clayton Christensen³

³ Author of several books on innovation, most notably, *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns*, in 2008 with Michael Horn and Curtis Johnson.

style, “disrupting class” without upsetting anyone. Of course, there is good reason for the lack of protests: None of the learning going on in the Apple Store is officially recognized—no grades, credits, or Carnegie units are awarded. Perhaps, however, that is the next generation of disruptions. And it is those disruptions that interest us most.

IMPLICATIONS FOR NEXT GENERATION LEARNING

So, why is what Apple is doing in its stores so important? What does it mean for learning?

For starters, consider the current status of our nation’s high schools. Each year about a million young people leave high school without a diploma. Many of those who do stay in school are bored and minimally engaged in challenging learning, are performing poorly, and have limited prospects for successful postsecondary learning and work. This situation is caused more by a deeply flawed school design than by poor execution; incremental or even dramatic improvement of that design will not keep those million young people in school or significantly change their career and life prospects. Getting better—even a lot better—at implementing the traditional school design is not nearly enough when doing differently, very differently, is so desperately needed.

In education, therefore, we need to see innovating as seeking first *different*, then *better*. That is, our innovating in education needs to create fundamentally different ways of doing things that result in considerably better outcomes. And to design significantly different and better learning opportunities and environments, educators need to challenge key assumptions about learners and learning. Therefore, they need to question the “school box” in which they are operating and innovate outside it as well as within.

Reflect for a moment on how many aspects of schooling are taken for granted in the vast majority of schools in this country. The way that time is allocated and used, the way that knowledge is treated, and the way that teachers and students relate to each other have not undergone any substantial change since formal schooling began in this country. Schools continue to fragment learning into grades and subjects, and certify learning by counting seat time and using paper and pencil tests rather than assessing demonstrated competence. Innovating inside this box of regularities is futile if we expect so much more from our schools and students. It is these regularities that drive so many students from our schools before they graduate and fail to prepare many high school graduates for success in postsecondary learning and careers. The dropout rate from college is, after all, as dismal as that for high schools.

Real innovation typically entails a deliberate and reasoned “creative destruction” (a term made popular in the 1940s by economist Joseph Schumpeter) of many, if not most, of those system regularities. But the notion of what constitutes high school is hardwired in our brains.⁴ Therefore, sometimes you need, as Christensen advises, to look outside the system you’re in. He suggests that the only innovation worth doing is the kind that completely redefines the problem and its context *before* thinking about creative solutions. He asks, therefore, novel questions about fundamental

⁴ It may be that one of the most insidious effects of the traditional high school experience is what it has taught all of us about what constitutes learning.

objectives. *Then* he thinks about innovating. This contrasts sharply with questions that assume that we have the problem and its context well defined, and that all we need is a few new solutions.

Most educators assume the schooling box they have is good enough and devote most of their innovating to working better within that box. Some of their innovations are deemed exemplary because they do the regularities better, and success is judged by using comfortable but grossly inadequate definitions and measures of success. Attempting to resuscitate this thoroughly exhausted design, educators add more days or hours to the days, extend periods, and combine subjects. They fail to fundamentally redesign schools and schooling, settling instead for a low form of utilitarianism without an anchor to any solid principles. It's a classic illustration of *vu ja de*: Educators continue the old and pretend that it's new.

Anyone willing to spend some time talking with high school and college dropouts will recognize that educators understand neither their problems nor their circumstances. Because we do, we are convinced that the same old designs for schools and schooling are broken. We need innovation that looks beyond refurbishing those designs; we need a new learning culture that is based on reconstituting the relationship between teachers and learners. The Apple Store experience provides a very powerful image of how that relationship might be designed.

One question the Apple Store designers certainly addressed was: How might we design a store and an experience that gets people to come back again and again? And buy again and again?

In that spirit, we ask: How might we design learning opportunities and learning environments so that every student chooses to engage in deep and sustained learning? And chooses to do that kind of learning for the rest of their lives?

What if, for example, we deliberately designed learning opportunities and learning environments that were deeply engaging and motivating and actually helped young people learn powerfully within their many areas of interest? What if there were lots of places where kids with similar interests could congregate to learn more, both within and beyond those interests, from experts and peers? What if there was a parallel and complementary system of learning resources that appealed to, and engaged, lots of kids in learning about learning? What if there were ways to provide, and give credit for, learning wherever and whenever it occurred? And what if many of the most expert "teachers" were not formally certified and credentialed by the educational bureaucracy?

What if our most powerful images of learning were not those of classrooms hung off long, bleak corridors or of those fragmented and disconnected, fifty-minute longer periods? What if the most valuable learning places and resources existed *outside* of the schools, and these places and resources were increasingly more important than schools in helping learners develop important skills and understandings?

What if we were able to create whole new forms of credentialing learning that were based on demonstrations of skills and understandings and that recognized in some formal way skills and understandings developed in any setting? And what if employers got serious about looking beyond

a high school diploma or undergraduate degree to focus on actual competence as measured by actual performances that demonstrate skill and understanding?

Addressing these design challenges would likely result in the creation of many alternative schools and alternatives *to* schools, or at least to schools as they are currently designed and operated. The Apple Store is one such alternative; to use Christenson's phrase, it is a disruption. It blends retail and school into a new type of learning environment that lets the customer learn anything, at any time, at any level, from experts, expert practitioners, and peers.

So, we look to Apple for signals, however faint, to tell us how to redesign the school box and then to innovate within it. What might that redesign look like? Our short list includes providing:

- Schools that accommodate learners rather than the other way around.
- Opportunities for student choice, particularly allowing for each student to "go deep" into a particular content area of interest.
- Authentic and sustained working relationships with experts and expert practitioners.
- Authentic and sustained community connections.
- Opportunities for students to develop and practice skills that lead to mastery.
- Projects and tasks that engage students and motivate them to commit to learning.
- Authentic applications of appropriate technology skills.
- Assessments that stress student demonstrations of skill and understanding and that motivate more learning.

The Apple Store design helps us to imagine different learning places inside all sorts of stores. How about:

- A Genius Bar inside a clothing store devoted to creating each customer's "look" using clothes the customer already owns and those she might purchase?
- A Studio for baking inside a local cafe?
- A tutoring center inside the local coffee shop? Free coffee for tutors?
- A health and nutrition learning center in a local market?
- An electronics school inside an electronics store?
- A store for problem solving?

A few examples provide images of potentiality: Home Depot and Whole Foods provide classes. Borders and Barnes and Noble provide weekly lectures by guest authors. And 826 Valencia, author David Eggers' storefront creation, provides support for young writers.

Others, including educators, have written of the time when anyone in any place will be able to learn practically anything at any level from anyone. It will take individuals and groups who know a lot about learning and learners to create the systems we need to support such learning. Of course, technology will be a critical enabler. Networks, social networking, and "wiki" capacities can be exploited to support learning. The thousands of how-to sites on the Internet allow anyone to learn and practice how to do just about anything. What all of these resources require is a framework, a system for helping each learner make sense of all of these resources and integrate them into a personalized learning plan.

We see the Apple Store design as an affirmation of what we are doing and trying to do in our own Big Picture Learning schools as well as a pointer to possible needed innovations in our own design, such as more enlightened applications of these new and emerging technology tools.

So the line of customers for high engagement learning at the Apple Store starts early and runs late. The crowds have thinned a bit in the current economic morass, but our guess is that other retailers would love to have such numbers roaming their stores and they are watching closely and thinking about their own adaptations of the design. As they do so, we would recommend that they not overlook the power of the experiences they provide for learning.

“Out of patterns come variation,” advises Cerda, the urban planner of Barcelona. And out of variation, patterns. We see the Apple Store as a significant variation in both retailing and in learning. Hopefully, at least for learning, its variations will generate patterns that will permeate society and eventually find their way into schools and universities.

The sci-fi novelist William Gibson wrote that the future is already here; its just not evenly distributed. If Gibson is right, then there’s a big chunk of the future of learning in the Apple Stores just waiting to be more evenly distributed. And we all would do well to spread that future into schools and communities throughout our country.