



**MONICA MARTINEZ**

*Students are accustomed to products and services customized especially for their needs. Learning has to step up and enter this world.*

## It's All About "Me"

In recent years, educators have been encouraged to personalize learning and not standardize education for some anonymous child in a sea of students. Schools have adopted practices and policies to ensure that every student is known by at least one adult. Schools have cut class sizes, added advisories at the secondary level, developed personalized learning plans, looped teachers across grades, created "small" schools with fewer than 450 students, increased the counselor-per-student ratio, and so forth. But these efforts are simply the tip of the iceberg and may even be superficial responses to today's students yearning for deep personalization.

Today's students yearn for deep personalization in the form of customization in their toys, online avatars, clothing, body piercing, and niche hobbies. According to Don Tapscott, one of the eight differentiating characteristics or attitudes of the Net Generation is that they "love to customize and personalize" (2008). They have grown up with the ability to change things through media. I am still from the generation where I had to buy a whole album even if I liked only one of the artist's songs. But the Net Generation — those born in 1977 and after — is growing up with the desire and opportunity to create personalized playlists and ring tones; "tag" web sites or photos; create "mash ups" of their favorite movies, TV shows, or music; or even design their own clothes, such as t-shirts through web sites such as [threadless.com](http://threadless.com).

Today's student places a large value on customization. As a result, learning will become one of many services and products where youth will demand personalization. How will educators and education leaders create personalized and rich experiences for our youth? Surely, creating a common experience where information is directly distributed to students en masse will not meet a student's need for a

customized learning experience.

The other phenomenon around deep personalization is the fact that almost every act we do can be tracked. That is, each of us leaves a data trail that can provide a robust, visible data picture of our lives as citizens, workers, and learners (KnowledgeWorks Foundation 2009).

I recently heard that well over 50% of our activity can be caught on some form of video surveillance camera. (Since I live in Tiburon, California, where officials have placed cameras at the only two entrance and exit points of the peninsula, I will probably surpass this statistic.) But using surveillance cameras is only one form of tracking. Think of all the data trails people leave from their online interactions — purchases from an array of online retailers, contributions to group activities, inquiries and Internet searches and preferences (playlists, buddy lists, and topics), tags, RSS feeds, bookmarks, and social networks. Consider all of the tracking opportunities through sensors and global positioning systems in devices such as cell phones and cars that capture location-based information along with health and environmental data. The information gleaned from that data trail can be used to provide the deep personalization that we desire.

As a result of these data trails and metrics, we're seeing the emergence of individuals and organizations focusing on or using personal metrics about performance. We can now quantify ourselves through an abundant mass of resources designed for self-measurements or self-tracking of data of all types to better understand ourselves, in body and mind. For example, until a year ago, when I did something aerobic at the gym like spinning or using the elliptical or going for a bike ride, hike, or walk, I would gauge my effectiveness by my fatigue or level of my breathing. But then I got a heart rate monitor, and that changed everything. Suddenly, I knew how hard, or how little, I was working. I had a heart monitor that captured every heartbeat in reaction to my ex-



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**MONICA MARTINEZ** is president of New Tech Network, Napa, California.

ercise regime. Not only did it do that, it tracked my calories burned per exercise and provided me with a total number of burned calories for the week. Suddenly, I couldn't even walk my dogs without this heart rate monitor because I might miss an opportunity to review my performance or add to my weekly cumulative. I do this, and yet, I'm not an athlete in training for a race, triathlon, or anything else beyond a few days of exercise. Now, I not only feel rewarded by the end of the week when my watch pops up with a summary of my exercise log and a trophy, but I feel shamed if I didn't do sufficient exercise and truly dread looking at my watch. I'm not alone in what some may feel is obsessive behavior. One of the most popular iPhone apps is one for counting calories. I observed two women on a school tour recently tracking their food intake throughout the day using this application. This is just a small example of the multitude of sensors that can generate and aggregate massive amounts of data about "the self."

Recently, *USA Today* (July 26, 2009) reported how new parents are using a web and mobile tool, called Trixie Tracker, that helps uncover and understand patterns in their newborn's sleep and daily schedules by generating visually striking charts. When it comes to "kicking the habit," individuals are turning to QuitKey.com, a program that tracks how much an individual smokes and builds a plan to gradually reduce the individual smoking. iBP tracks an individual's blood pressure and pulse rate through an iPhone and iPod touch application. Individuals can even e-mail cumulative, long-term data from this device to their doctor for review.

A recent article in *Wired* argues that nobody has done this as well as Nike (McClusky 2009). The story focuses on Nike+, "a transmitter that fits into sneakers and transmits data to a receiver that plugs into an iPod." This transmitter plays a runner's favorite music while tracking distance and speed, even providing voice cues to help the runner meet personal goals. The *Wired* article argued that "the real power" of this device comes from the user's ability to upload the data to view personal trends and to compete against others. Clearly Nike has evolved from "just do it" to "just capture it, sync it, and share it."

Manufacturers, service delivery organizations, marketers, retailers, and food service providers are aware of this growing consumer demand to track services and individual met-

rics and stand prepared to capitalize on the desire for personalized performance or health metrics.

### Customizing Education

How can education leaders seize upon this need for deep customization and the use of individualized metrics to deeply personalize learning for our students unlike what we have seen before?

One way to personalize learning and use real-time metrics is through computer adaptive testing (CAT). CAT successively selects questions to maximize the precision of the exam based on what's known about the examinee from previous questions. The difficulty of the exam is essentially tailored to an individual's level of ability. As a pilot project in Utah, some districts dropped the Iowa Test of Basic Skills and Utah Basic Skills Competency Test — criterion-referenced state tests given only once at the end of the year — for computerized, adaptive tests given several times a year. Ed Works, a high school reform model, is one of 3,400 partners that use Measures of Academic Progress (MAP) — a state-aligned computerized adaptive test that reflects the instructional level of each student and measures growth over time — as a means to improve teaching and learning in high schools they serve.

Even without the use of computer adaptive testing, organizations, schools, districts, or states can personalize learning simply by matching individual test scores with content. This past summer, the North Carolina Department of Public Instruction jointly with the governor's office, public libraries, and parent organizations led a new initiative that matched a student's Lexile scores to his or her summer reading list in an effort to boost individual reading skills. Students in 3rd through 8th grades and high school students taking the English I assessment received a Lexile reading score with their end-of-year test results. Through an easy-to-use, free online tool, students were able to use their Lexile scores to find books consistent with their reading level (<http://fab.lexile.com>).

Given the Net Generation's desire to customize and personalize their products and experiences and the natural proclivity to improve themselves through personal metrics, we have an unprecedented opportunity to support and accelerate personalized learning beyond that on which we have traditionally relied. ■



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