‘Personal Learning Environments’ Focus on the Individual

By Katie Ash

It’s clear that more and more schools are aiming to prepare students for a global marketplace that requires networked learning experiences, an understanding of digital citizenship, and a way to navigate and organize a stream of information and resources from a variety of different sources—all characteristics emphasized in a “personal learning environment,” an educational approach the New Media Consor-

Editor’s Note: Personalized learning offers the promise of individualized educational opportunities for students but comes with a unique set of logistic and technology concerns. In this Spotlight, discover how educators are defining personal learning environments, see the vastly different approaches districts are taking with personalized learning, and hear what massively open online courses (MOOCs) might mean for K-12 education.

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tium’s 2012 K-12 Horizon report listed as a key ed-tech trend to watch.

What’s less clear is what exactly a personal learning environment is. Its relatively new and flexible structure can make what’s known as a PLE hard to pin down for many people, even though the use of the term, and approaches associated with it, are being embraced by a growing number of schools.

While PLEs are commonly created using specific technologies and tools, such as online-resource organizers like Symbaloo or Ever-Note, the model is not wedded to a specific technology but rather to a process that aims to visualize and organize the influx of information and resources that students are confronted with daily. It is essentially an educational response to the overload of information in the digital age.

PLEs consist of a wide range of connections with both digital and nondigital resources. They blur the lines between formal and informal learning. And precisely because they are individualized to the needs and interests of the learner, each one can look completely different.

“It’s really about melding together your own personal learning space with all these different resources,” said Wendy Drexler, the director of online development in the office of continuing education at Brown University.

But this approach can be a tough sell in schools, where the concept isn’t likely to be seen in its full-fledged form, said Ms. Drexler. “What I see more of happening is people taking bits and pieces ... and integrating it,” she said.

Ms. Drexler conducted research on PLEs with a group of 7th graders at the 1,150-student P.K. Yonge Developmental Research School in Gainesville, Fla. in 2010 using Symbaloo with the help of the students’ science teacher Randy Hollinger.

Symbaloo is a free service that allows users to bookmark Web pages, videos, and other resources and digital tools onto one page where each tile represents a different link. The company, which was founded in the Netherlands but has offices in California, has created SymbalooEDU to cater to the needs of educators—one of the service’s biggest user bases.

In addition, Symbaloo provides certification programs for teachers to learn how to incorporate personal learning environments and technology into their classrooms.

At the school where the pilot took place, students created their own Symbaloo pages with links to websites they used regularly, such as their email accounts, links to their own blogs, and their school’s website.

Next, Ms. Drexler and Mr. Hollinger taught students how to use the PLEs to enhance their research strategies during a six-week unit on venomous creatures.

Students used their Symbaloo pages to bookmark information, keep track of sources, and save links to experts in science who would later review their projects.

Ms. Drexler and Mr. Hollinger used that opportunity to teach students how to determine the legitimacy of different Internet resources and how to tell if the information they found was accurate and unbiased.

“This sort of learning actually helps students organize themselves in a very easy world,” Mr. Hollinger said. “Before, when students were working, they would get lost in the hubbub of everything that happens online. We found it was essential for them to be able to create a space [for those resources].” During the pilot study at the Florida school, Mr. Hollinger and Ms. Drexler found that the biggest challenges were logistical—struggling with slow Internet connections and with Web filters that blocked sites students wanted to use, such as YouTube.

To comply with student safety regulations and keep track of what students were doing, Mr. Hollinger installed a program on his computer that allowed him to see what students were doing on their computers—essentially, he had a window into how each student approached his or her schoolwork.

Striking a Balance

Striking that balance between allowing students to explore the Internet’s full potential and keeping them safe and on task can be challenging, he pointed out, but Mr. Hollinger has noticed that when students are allowed more freedom, they are likely to take on more responsibility as well.

Since the pilot two years ago, Mr. Hollinger has moved to an independent school—the Technology Engineering Science Leadership Academy, or TESLA, in Santa Rosa Beach, Fla.—that is entirely structured around PLEs, he said, and in the three years that he has used the approach in his classes, only a small number of disciplinary problems have occurred. “What we found was that students are enjoying the process of learning with a personal learning environment so much that they really didn’t want to ruin it,” he said.

“They took responsibility for their own learning and took personal responsibility for the overall culture and environment in the class-room.”

At his new school, students begin their day by logging into their Symbaloo pages, which provide links to websites for each of their classes. Students can then see the resources their teachers have posted, complete assignments, and turn in their schoolwork.

The school, which operates on a project-based learning model, uses Symbaloo as its backbone, Mr. Hollinger said.

One particular challenge for many schools that want to use the approach is a lack of technology tools to help students take ownership of their PLEs, said Ms. Drexler. What’s ideal for fostering a strong PLE initiative, she said, is a 1-to-1 school model, in which each student has access to his or her own digital device—a laptop, a netbook, a tablet, or a smartphone.

Throughout the pilot, Ms. Drexler and Mr. Hollinger helped students learn how to vet resources and determine whether they contained legitimate information. They also required students to expand their PLEs by reaching out to experts to ask them for help or advice on their research projects.

“One of the things that’s important is making sure [students] actually know how to do a good search beyond Google.” Ms. Drexler said. While students may be tech-savvy, they need to be taught how to use those skills in an educational and professional setting, she said.

Sharing Information

Shannon Miller is a teacher-librarian in the 600-student Van Meter school district outside Des Moines, Iowa, which serves students in grades K-12.

In her district, 6th through 12th graders receive their own laptops under a program that started two years ago. While elementary pupils do not have their own devices, they also learn in technology-rich environments using tablets and other computers, Ms. Miller said.

Teachers may need to create PLEs for younger students, but as students get older, they can take on the aggregation of resources on their own and customize their PLEs based on how they use them, said Ms. Miller.

For example, older students could customize a PLE by adding links to non-school-related resources, such as social-networking sites, blogs they are interested in, or videos they
It clicks for teachers

“Students become the owners of their own learning, and that is something I appreciate because I’m not always going to be there for them.”

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have found. They can also rearrange the way the tiles are organized on their pages, such as by grouping school-related links and putting non-school-related ones in a different area.

Ms. Miller began using Symbaloo several years ago as a way to organize information for students as well as connect to the outside community.

“It’s a great way for [students] to share with their parents,” she said. “All those things coming together in one spot makes what we’re doing in school more transparent [for our parents].”

Being in a 1-to-1 computing environment has helped connect students from the small rural district to teachers, experts, and authors far beyond Iowa, Ms. Miller said. “It has opened us up to the world.”

Shelley Breivogel, a 2nd grade teacher at the 750-student Scott Elementary School in Evansville, Ind., discovered PLEs when at her school began a curriculum-mapping project. They needed a way to organize the curricular resources they found, and printing materials out and filing them seemed cumbersome and even ridiculous in the digital age.

Since then, Ms. Breivogel has embraced PLEs as a way to share information with her students as well. She organizes units through Web mixes she creates in Symbaloo and shares them with her classes. For example, a Web mix may include links to resources that explain each of the standards the class will cover that month.

In light of the Common Core State Standards, and the related online assessments that are scheduled to be integrated into schools during the 2014-15 school year, Ms. Breivogel sees PLEs as a way to help better prepare students.

“[Students] are going to have to be able to search for information online, make connections, analyze data, move from one source to another, and compare and contrast. That’s a lot of higher-order thinking skills,” she said. “That [use of PLEs] lends itself to enabling students to be more prepared for those types of assessments.”

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Race to Top Districts ‘Personalize’ Plans

By Michele McNeil

The 16 Race to the Top district winners, pushed by $400 million in federal grants that put a premium on personalized learning, are embarking on vastly different makeovers of the classroom experience—from districtwide approaches to a narrower blueprint focused on middle school math.

Despite the divergent approaches, a review of the winning applications shows those districts are tapping similar tactics: mobile devices and individualized learning plans for students, personalized learning coaches for teachers, and data dashboards that collect all student learning information in one place.

What’s more, many of the districts are embracing the philosophy that learning isn’t defined by time spent in class, but by mastery of a particular subject or lesson.

For example, the Middletown city school district in New York is piloting a policy in which elementary students advance to the next grade when they show mastery of grade-level standards. In Carson City, Nev., high school students who master their high school subjects in the middle of the year can move right into earning college credit.

Last year’s grant contest was the first time the U.S. Department of Education used its signature Race to the Top brand to try to push for education redesign at the local level, specifically around personalized learning.

In putting the grant money up for grabs by districts, federal officials sketched out a broad definition of what they wanted in a personalized learning environment: one in which educators used data and 21st-century tools—such as mobile devices and “learning algorithms”—to customize instruction to the needs of individual students.

The original Race to the Top competition, launched with money from the 2009 federal economic-stimulus measure, was considered successful in getting states to adopt certain policies favored by the Obama administration, such as charter school expansion and teacher evaluations tied to student academic growth.

But it remains unclear how successful the district iteration, funded through fiscal 2012 congressional appropriations, will be, experts in personalized learning say.

“What Race to Top does best is change the fundamental condition under which school happens—whether that’s policy or market conditions,” said Michael B. Horn, the education executive director of the Innosight Institute, a San Mateo, Calif.-based think tank that promotes personalized learning. “But when Race to the Top delves into operations of school districts,” he said, “that’s a whole other matter.”

But if nothing else, Mr. Horn said, the latest Race to the Top has “elevated student-centric learning onto the radar.”

Local Leaders

In December, U.S. Secretary of Education Arne Duncan announced the 16 district winners, which include three charter school districts, two educational cooperatives, one large urban district (Miami-Dade County in Florida), and 10 midsize districts. Grants ranged from $10 million to $40 million. Mr. Duncan and his staff have hailed the portfolio of winning districts as leaders in upending the traditional school experience.

Most of the winning districts plan to buy new technology with their grants. In fact, a review of the project budgets for those districts shows that at least $77 million of the $400 million total will be spent on technology—from iPads to additional bandwidth for schools. For example:

• The 12,000-student Metropolitan School District of Warren Township in Indianapolis will buy 6,750 new iPads so elementary and middle school students can, among other activities, keep up to date on their progress toward academic goals.

• In Guilford County, N.C., each of the district’s 17,000 students use hand-held devices to access digital content, a new online learning platform, instructional software, and subscriptions to various services.

• The 345,000-student Miami-Dade system will offer 30 new laptops for students in its...
<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>AWARD (in millions)</th>
<th>SCOPE</th>
<th>DETAILS</th>
<th>TECHNOLOGY NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carson City, Nevada</td>
<td>$10.0</td>
<td>4 middle and high schools, 4,109 students</td>
<td>E-portfolios for students to track academic progress, goals; high schools organized around six career clusters; project-based learning to further develop students' interests; professional development for teachers on student goal-setting.</td>
<td>Laptops for program implementation specialists at each school; new e-portfolios software.</td>
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<tr>
<td>Charleston County, South Carolina</td>
<td>18.4</td>
<td>19 schools, 9,483 students</td>
<td>New digital learning platform to capture all student data in one place; teachers use new platform to assign tasks and use rapid-response daily assessments; digital personalized learning plan for every student; project-based learning and online courses to meet individual student interests.</td>
<td>Mobile device for every student and teacher.</td>
</tr>
<tr>
<td>Galt Joint Union, California, California</td>
<td>10.0</td>
<td>6 elementary schools, 3,800 students</td>
<td>Personalized learning plans for every student; computer-adaptive tests to inform lessons; personalized learning coaches for teachers.</td>
<td>Increased access for students and teachers to “virtual learning devices.”</td>
</tr>
<tr>
<td>Green River Educational Cooperative, Kentucky</td>
<td>40.0</td>
<td>112 schools in all grades, 59,311 students</td>
<td>Individual career profiles for every student grouping and regrouping students to tailor learning; personalized learning teams will work with school leaders, teachers; elimination of school time for students who demonstrate off-campus subject mastery.</td>
<td>Wi-Fi on school buses, with access expanded later to churches and businesses.</td>
</tr>
<tr>
<td>Guilford County, North Carolina</td>
<td>30.0</td>
<td>24 middle schools, 17,000 students</td>
<td>Personalized learning plans for students; students grouped into learning cohorts; new “personalized learning environment facilitators” to coach school personnel.</td>
<td>Mobile, hand-held device for each student and teacher, which features digital content, online learning platform, instructional software, subscriptions.</td>
</tr>
<tr>
<td>Harmony Public Schools, Texas, Texas</td>
<td>29.9</td>
<td>36 middle and high schools, 12,240 students</td>
<td>Project-based learning, goal-setting, and academic and career maps for students; “custom day” schedule with 2 hours a day of remediation in math/English, advanced classes, or electives; data dashboard to combine all data points into a single, user-friendly Web portal accessible to students, parents, educators.</td>
<td>Portable devices for each student to take home.</td>
</tr>
<tr>
<td>Idea Public Schools, Texas</td>
<td>29.2</td>
<td>All 25 schools, 12,617 students</td>
<td>One-on-one coaching for educators to use personalized learning in core classes; new dashboard to incorporate all student-assessment data; more digital learning tools and software.</td>
<td>Offer more books on digital devices, add adaptive reading software to computer labs, create a mobile app for educator observation tool.</td>
</tr>
<tr>
<td>Iredell-Statesville, North Carolina</td>
<td>20.0</td>
<td>15 middle and high schools, 9,321 students</td>
<td>30 minutes of “IWAD” time (or Supporting Warriors to Achieve Greatness) to pursue personal interests; college and career mapping for students; blended learning coach in each school; in-person and digital instruction for students.</td>
<td>Digital device for each student to take home.</td>
</tr>
<tr>
<td>KIPP DC, District of Columbia, District of Columbia</td>
<td>10.0</td>
<td>All 10 schools, 3,040 students</td>
<td>New learning-management system to combine assessment/achievement data into one spot; resident teachers guide small-group learning while lead teachers concentrate on personalized learning.</td>
<td>Scale-up iPad distribution for teachers, increase iPad and computer access for students, increase use of software such as Dreambox for math, create online observational platform for teacher evaluations.</td>
</tr>
<tr>
<td>Lindsay Unified, California</td>
<td>10.0</td>
<td>All 8 schools, 4,074 students</td>
<td>New digital learning (student) platform with standards-assessment data in one place; personalized “sequence of instruction” for students based on placement tests and updated with formative-assessment data; new digital facilitator platform that provides instructional content tied to standards, intensive teacher-training modules in technology, student leadership.</td>
<td>Netbooks, tablets, or mobile devices to take home.</td>
</tr>
<tr>
<td>Metropolitan School District of Warren Township, Indiana</td>
<td>28.6</td>
<td>16 schools in all grades, 11,611 students</td>
<td>Individualized goal-setting for students, with the ability to monitor progress through a digital platform; teacher training in new technologies; students in grades 7-12 use online coursework to earn high school credit based on competency versus seat time; extended school hours to increase Internet access for students.</td>
<td>Laptops in 30 wireless, high school English classrooms; 6,750 iPads across all grades; $25 in apps per iPad per year; 110 fortified iPads for special needs students; 500 additional wireless access points for high-density buildings.</td>
</tr>
<tr>
<td>Middletown City School District, New York</td>
<td>20.0</td>
<td>All 7 schools, 7,000 students</td>
<td>Transition to blended learning classrooms with personal and digital instruction; creation of new Hybrid Learning Management System that provides digital content for students and the ability for teachers to monitor progress; plot a competency-based promotion policy for elementary students (versus seat time).</td>
<td>iPads or similar tablets for all students in grades 11-12; 40 Chrome netbooks for elementary students.</td>
</tr>
<tr>
<td>New Haven Unified, California</td>
<td>29.4</td>
<td>13 schools, 12,719 students</td>
<td>Academic and career plans created for each student; parent and student digital modules to track progress; teachers use technology, online assessment, and open education resources to free up time for small-group instruction.</td>
<td>Broadband devices for take-home use for 4,500 students and 170 teachers in high school, and 400 teachers and 8,400 students in middle school.</td>
</tr>
<tr>
<td>Puget Sound Educational Service District, Washington</td>
<td>40.0</td>
<td>261 schools, 147,085 students</td>
<td>New regional data portal for students, teachers, parents; personalized student plans for career and college; equip all K-8 students with adaptive math instructional tools.</td>
<td>New digital tools, to be determined, to personalize STEM learning.</td>
</tr>
<tr>
<td>Miami-Dade, Florida</td>
<td>30.0</td>
<td>49 middle schools, at least 11,760 students</td>
<td>Replicating Kipp math model in all 49 middle schools with personalized math learning plans for students; renovated, high-tech classrooms, individualized instruction, student assistance profiles to flag students at risk of failure.</td>
<td>Wireless technology for renovated math classrooms; 30 laptops per classroom for students to take home; 60 laptop per classroom for in-school use; laptops for 147 teachers.</td>
</tr>
</tbody>
</table>
| St. Vinny Valley Schools, Colorado           | 16.8                | 8 elementaries, two middle schools, 1 high school, 5,757 students | Improving STEM is select schools by creating individualized academic and career plans, expanding Web-based “tutormentoring” between students and busy professionals; creation of high school “innovation center” to provide real-world experiences tailored to their interests with STEM professionals. | Each “innovation center” high school student will have a technology device.         

**MAKING IT PERSONAL**

As part of last year’s Race to the Top contest for districts, applicants had to design a four-year plan that would personalize learning for students. Through programs and technology, the 16 winners approach personalized learning in different ways.
There’s less lecture, less students sitting in desk. There will be more of a rotation around project-based learning and small-group instruction, and more work happening on a device. More subtle will be that the teacher is the leader.”

KELLY MARCY
Executive Director, Student Services, Iredell-Statesville Schools

is “not a technology initiative.”
One of its primary components aims to spark a culture shift in students by making them more responsible for their own learning.
Students will start to align their learning and goals with career aspirations even in the early grades.
“I’m not talking about making Einsteins out of 3-year-olds,” said George Wilson, the executive director of the Green River cooperative. “It’s about having them say: ‘What I do now matters about my future.’ ”

In Charleston County, S.C., a new digital learning platform will serve as one-stop shopping for all student data so parents, teachers, and students can track academic progress.
“One of the most important things we’re pushing is students owning their learning,” said Lisa Herring, the associate superintendent for academic and instructional support for the 45,000-student district. “But that also does not minimize the very important role of the teacher.”

Getting students engaged in their own learning—and allowing them to pursue their own interests—is a common strategy of the winning districts.
The 24,400-student Harmony public schools, a charter school network in Texas, has designed a “custom day” with two hours of flextime for students to receive remediation in math or English/language arts, take advanced classes in those subjects, or pursue electives.
The Iredell-Statesville district in North Carolina gives students 30 minutes of “SWAG time” (shorthand for one high school’s Supporting Warriors to Achieve Greatestness program) to pursue personal interests—learning to play the guitar or practicing French, for example.

That is just a small part of a much more comprehensive approach to customized learning, district officials say.
“I think the biggest change is the way instruction is delivered. This is a major culture shift,” said Melanie Taylor, an associate superintendent of the 20,000-student Iredell-Statesville schools.

Making the change means incorporating digital learning into the classroom, but it also means using “blended learning coaches” in each building who can help Iredell-Statesville teachers use new technology and small-group instruction in their daily lessons.
“There’s less lecture, less students sitting in desk. There will be more of a rotation around project-based learning and small-group instruction, and more work happening on a device. More subtle will be that the teacher is the leader.”

Coverage of “deeper learning” that will prepare students with the skills and knowledge needed to succeed in a rapidly changing world is supported in part by a grant from the William and Flora Hewlett Foundation, at www.hewlett.org.
and change the way teachers go about their work.

Already, said Garrigan, models like Khan Academy have shown what works:
- Short videos that spend roughly 10 minutes on a single topic.
- A personal, collegial feel marked by conversational dialogue, handwritten notes, and an informal style.
- “Retrieval feedback” that quizzes students and promotes learning retention every five minutes or so.
- Deadlines for tests and homework.
- Study forums and groups.

“Our attention span can handle that,” Garrigan said.

Some educators are prone to dismiss some of those elements, he said. Take the constant short check-ins of the “retrieval feedback” quizzes. While many educators may believe it to be a shallow educational strategy, Garrigan told dozens of teachers at the conference “that little thing promotes learning in ways that some of the best talent in this room has had difficulty doing.”

Likewise, said Garrigan, the opportunity for personalization in online courses shouldn’t be dismissed.

“It sounds like an oxymoron, but there is testimony [from higher ed] that it’s possible,” he said.

With dropout rates still alarmingly high across the country, the potential benefits can’t be ignored, he argued.

Of course, said Garrigan, there are challenges: Who will validate student learning? Who is responsible for the quality of course content? What about special education? How will state departments of education react?

But the “water has already begun trickling through the dike,” he said.

If K-12 teachers want to avoid getting swept away by the coming flood, they’d better be able to adapt, as some of their counterparts in higher ed have already begun doing.

The rapid transformation can be “tough to swallow,” said Garrigan, “but I think, ‘OK, I have to change my views.’”

Published November 4, 2013, in Education Week Vander Ark on Innovation

COMMENTSARY

4 Essential Attributes of Personalized Learning

By Tom Vander Ark

- NACOL wrapped their tenth annual conference this week in Orlando. What used to be the Virtual School Symposium is now the Blended and Online Learning Symposium this week in Orlando. And blended it was, as we outlined in our summary, the majority of the 275 breakout sessions dealt with technology enhanced learning at school. I participated in several sessions that reviewed the updated Blended Learning Implementation Guide.

Like corporate and military training most K-12 and higher education will soon be blended. I even saw an app for blended bible studies last week. But blended isn’t the goal, it’s just a better way to personalize learning.

Competency-based learning. A foundation paper on competency-based learning I reviewed over the weekend did a great job of enumerating the wide range of issues of moving from a system based on time to one based on learning. In Considering Competency-Based Education I said, “It will probably take us a generation to fully embrace high common expectation, blended formats, and show what you know policies and practices.”

Last week, Chris Sturgis reported Takeaways from EAA School Visits , “It was great seeing a highly developed competency-based model that was using blended learning extensively. The more time I spend around schools doing blended learning and competency-based learning, the more I’m thinking that to get to competency we have to figure out how to offer much more vivid deeper learning experiences.” I share Chris’ enthusiasm for blended learning that incorporates projects.

The architectural shift competency-based environments where students progress based on demonstrated mastery isn’t really the goal, it’s just a better way to personalize learning.

Personalized learning. “In a personalized learning environment, students’ learning experiences - what they learn, and how, when, and where they learn it - are tailored to their individual developmental needs, skills, and interests,” said Scott Benson in a recent blog. “Although where, how, and when they learn might vary according to their needs, students also develop deep connections to each other and their teachers and other adults.”

Benson, who was recognized by iNACOL for his contributions to the field last week, outlined four essential attributes of a personalized learning model in this acceptance speech:

- **Learner Profiles:** Captures individual skills, gaps, strengths, weaknesses, interests and aspirations of each student.
- **Personal Learning Paths:** Each student has learning goals & objectives. Learning experiences are diverse and matched to the individual needs of students.
- **Individual Mastery:** Continually assesses student progress against clearly defined standards and goals. Students advance based on demonstrated mastery.
- **Flexible Learning Environment:** Multiple instructional delivery approaches that continuously optimize available resources in support of student learning.

That’s a pretty good list. Despite progress toward next-gen platforms, all four elements remain more aspirational than manageable for schools. Scott makes the case for continued public, private, and philanthropic investment in the toolset so that all students can soon benefit from personalized learning.

Tom is a director for iNACOL.
Standardization? Personalization? Or Both?

By Peter DeWitt

“It’s what good teachers have always known. That their job is not to teach subjects, but to teach students.”

Sir Ken Robinson

S

ir Ken Robinson, one of my favorite education experts, believes strongly in personalized learning. He has been quoted as saying:

“Personalized learning, to me, is the process of contouring learning to the individuals that you’re dealing with, recognizing that we all have different strengths and weaknesses, different interests [and] different ways of learning.”

Education critics believe that we do need a national set of standards which are internationally benchmarked, and seem to have very little personalization at all. If you have a moment, do a quick Google search on “Do we need education standards?” Most of the results I received were all from the U.S. Department of Education, state education departments and for-profit companies.

Without sounding too cynical, I do like the idea of standards, especially if they are internationally benchmarked. However, politicians and policymakers keep using international comparison data incorrectly just to focus on the failure of public education, and push for a more standards-based education, which is why there is a resistance to any standards. They are being sold as the end all to be all and somehow become the worst thing we have seen them that are the worst thing we have seen in education, which of course have only gotten worse in the past few years.

Is it possible to have standards without having standardized tests because the problem may not be the standard...but what we do with it? And yes, that goes for the Common Core Standards as well. Is the problem the Core or what we do with the Core?

Recently, I read a few blogs that stated standards are the worst thing to happen to education. Are they really the worst thing? Or is it the testing that came along with them? I believe it’s the testing and accountability on steroids that came along with them that are the worst thing we have seen in education, which of course have only gotten worse in the past few years.

Is it possible to have standards without having standardized tests because the problem may not be the standard...but what we do with it? And yes, that goes for the Common Core State Standards as well. Is the problem the Core or what we do with the Core?

Like you, I have seen many examples of homework that isn’t age appropriate and confusing. However, does the school leader or teacher have any responsibility in what goes home, because it might not be the Core but the worksheet that was chosen? I mean...let’s face it, we have all seen inappropriate homework long before the Core entered our lives.

Please don’t get me wrong because I am proceeding with caution when it comes to the CCSS. I believe that it might provide a good base for some kids, but the reality is that there will always be students who do not meet the expectations of the CCSS from year to year.

What happens then?

I have a hard time thinking that kids who come in knowing 1/16th the language and vocabulary that their peers know are somehow going to rise to the challenge of more “rigorous” work. There are parts of the CCSS that need to change, and if they do not, there will be a mass exodus of states using them because of parents and educator pressure. Perhaps all of the money being spent on flawed (and abusive) state testing could somehow be directed toward strengthening what happens between the ages of birth and four before children enter kindergarten.

I read a blog somewhere, and I’m not sure where, so please forgive me for not linking to it...that we cannot expect every student to break the 4-minute mile. This doesn’t mean we can’t encourage all kids to run, but everyone’s Personal Record (PR) is different. Just because someone doesn’t break the 4-minute mile doesn’t mean they didn’t experience growth. And just because they didn’t break that barrier doesn’t mean they can’t be successful somewhere else.

In the End

Is it possible that it doesn’t have to be all or nothing? Is it possible that both can be done? Standards become a problem when we expect everyone to reach the same benchmark, but what if educators were allowed a bit of flexibility? Standards are a problem when we think there is only one way to show success, which is where personalization enters into the picture.

If our only benchmark to show success with standards is through a test, it’s abusive and wrong. We should not be referring to kids as a “1, 2, 3, or 4” depending on their score from high stakes testing, and that happens far too often, and has devastating effects on any learning that could be accomplished. Educators should always have the freedom to use standards as a base but get to the heart of individual learning through personalization. Students and teachers should be given autonomy in their learning.

My fear of what is being done with standards goes further beyond what happens with kids in elementary school who hate school because they feel that they are not good enough. My fear continues on for those students who drop out of school because they believe it is their only option. If we could offer personalization for them without the constant fear of accountability, perhaps they would not drop out in the first place.
Promote Deeper Learning and Check for Understanding

How It Clicks

It’s no surprise to teachers that deep thinking and transferable knowledge result when students fully understand the principles behind specific facts and concepts. “Knowledge is constructed through social interactions among people,” writes Karen Swan. “Better quality learning results from the greater personalization of learning experiences.”¹ In a blended learning classroom, the technology is part and parcel of teaching students the facts and concepts, but the deep learning—the true understanding of the concepts—comes from teachers.

It is teachers whose work takes information and turns it into knowledge—building deep-thinking strategies and “positive attitudes toward learning that have been shown to enhance deeper learning.”² It is teachers who fully develop student learning that supports “more complex learning for their students”³ through their own:

- Deep understanding of their subject matter;
- Knowledge of students’ common ideas and misconceptions related to the subject matter;
- Knowledge of the thinking of individual students;
- Sensitivity to cultural, ethnic, and gender differences;
- Knowledge of how children learn; and
- Flexible, adaptable teaching strategies to engage learners.⁴

Using these skills in a blended learning classroom, teachers are able to help students verbalize their thought processes, correct misconceptions, and resolve problem-solving deficits—resulting in students who have deep knowledge of a subject, topic, or concept.

We know that when students engage with content in active ways, transfer of knowledge is increased. This is enhanced when teachers frequently check for understanding and allow students to learn not only by themselves but also “vicariously,” with other students in the class.⁵

In a blended learning environment, students not only have access to individualized, engaging online content, but also to teachers who coach and mentor them to elaborate, question, and explain—asking students to think about a text or problem they encountered in the online course, supplementing the online work with offline examples, encouraging group discussion, and providing valuable one-on-one time when confusion arises.
Making It Click

Rio Rancho Cyber Academy
Rio Rancho, New Mexico
Elaine Manicke, Principal
Heidi Parnell, Online Program Manager

Now in its eighth year, the Rio Rancho Cyber Academy serves 158 students in grades 6–12 in Rio Rancho, the third largest city in New Mexico. The school prides itself on its hybrid setting, merging traditional teaching methods with the latest technology.

Students at the Cyber Academy spend two to three days a week on campus and work off-campus the rest of the week. While on campus, students receive one-on-one help from eight teachers and work in groups for a variety of purposes. Off campus, students have near-constant access to teachers, who check their work regularly and monitor their progress.

Nearly six years ago, the staff at the Cyber Academy developed a document of guiding principles, Writing and Thinking Across the Curriculum. The goal of this document was to establish clear, concise expectations for student learning for all members of the Cyber Academy community.

The concept is simple: Identify the skillsets all students need in order to achieve success in creating, discussing, and presenting through interactive work. Skills include:

- **Reading and answering questions** to develop vocabulary and comprehension, to activate schema, to predict and question;
- **Note-taking** to use vocabulary and refresh objectives, to study and review, and to underscore relevant information;
- **Writing short answer responses and essays** to determine writing purpose, to think and organize, and to use relevant information; and
- **Developing thinking maps** to organize thinking and information, to document information, and to discuss learning in class.

These skills aren’t only for students. They also help teachers, says Elaine Manicke, the Principal of the Academy. Using this rubric, “We set expectations for students, ensure standards are taught, assess student competence, and have a chance for immediate intervention if someone struggles.” Moreover, teacher evaluations and expectations for performance have “helped to define very specific expectations that are key to student success,” Manicke notes.

Teachers at the Cyber Academy mentor, monitor, motivate, and model, helping students understand what mastery of a topic or skill looks like, and encouraging them to take ownership of their success and learning. If students struggle with an online activity, they can reach out to a teacher—either in person or by e-mail—for immediate help.

Even if students don’t reach out for help, the data in programs like Edgenuity make it easy for teachers at the Cyber Academy to assess understanding—they map student work to the established lesson objectives, and reteach if necessary. “In reteaching,” says Heidi Parnell, Online Program Manager for the district, “the focus is on each individual student’s learning through small group or one-on-one tutoring to attend to learning gaps. Teachers have the means within the enriched virtual learning environment to practice personalized learning and adapt to the needs of their students, reinforcing and encouraging higher levels of comprehension.”

In this blended environment, the “Cyber Academy has so much more flexibility to meet the needs of students,” says Manicke. “That can be a scary thing, when you think about a classroom full of kids all learning at different places and paces.” This kind of work requires a tight-knit group of communicators working together to serve students. At the Cyber Academy, there are no students on campus on Friday afternoons, so the teachers use that time to collaborate and plan.
Deeper Learning Dos

**Do establish a routine.** Students, especially those who gravitate toward alternative learning programs, need to understand the expectations placed on them. A daily routine (both on and off campus) set by the teacher goes a long way toward reaching those expectations.

**Do empower students to advocate for themselves.** If they believe their understanding of a topic or skillset isn’t reflected in the data, they should feel comfortable saying so. The teacher’s job is to facilitate learning, and sometimes in the argument for mastery, everything clicks.

Deeper Learning Don’ts

**Don’t let students believe the work is too hard.** You start losing kids when they think they can’t do it or that they won’t understand. Make sure they see their progress. Find little places to make them active owners of even the smallest amounts of learning.

**Don’t believe all teachers can do this without training.** Blended learning takes a special kind of teacher. Lecturers and assigners are not enough. This work takes highly qualified subject area teachers who can facilitate and mentor to get at learning in a different way and ensure it’s really happening, no matter where the student is.

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2 National Research Council (2012), 186.


4 National Research Council (2012), 186.

Fighting the Enemies of Personalized Learning

By Joseph S. Renzulli

T
here are conferences for just about everything these days, but because of my interest in personalized learning, it appeared that this one on redesigning personalized learning would be just the ticket for gaining new insights into how learning can be more responsive to the divergent needs and diverse populations in today’s schools. Most educators agree that the one-size-fits-all curriculum needs addressing, and this by-invitation-only “summit” showed so much promise that I wangled an invite. Resplendent with all the buzzwords of the personalization and differentiation mystique (“flexible,” “student-driven,” “authentic,” “everywhere learning,” “systemic redesign”—to mention a few), the event would be staffed by the gurus of school reform and attended by education power brokers and CEOs from the public and private sectors.

Wow! What could be more appealing and hopeful for a change from the harmful direction that education has taken since the No Child Left Behind Act turned the learning process into a gigantic text-consumption and weakness-based test-prep industry? And the expectation that technology was a major answer to this promise of a revolution in personalizing learning made the conference even more appealing.

The emergence of technology in education has certainly created a renewed interest in personalizing learning and providing teachers with the tools necessary for differentiating curriculum. Early efforts to use technology to personalize learning can be traced back to B.F. Skinner’s teaching machines, which were designed to use rote-and-drill to automate the task of programmed instruction. Get the correct answer and you moved on to the next question. A wrong answer recycled the student through more practice material until he or she answered the question correctly.

“True personalization requires more than just looking at achievement levels and trying to compensate for deficiencies.”

B.F. SKINNER

When not available locally, but they almost always follow a linear, sequential instructional model rather than a more inductive and investigative model of learning. To paraphrase Gertrude Stein, a course is a course, a course, or in education-speak: Standards-driven prescriptive material is geared toward answering the questions at the end of the chapter and taking another achievement test. Skinner’s teaching-machine movement failed because we were treating students like Pavlov’s dogs. We could face the same consequences with today’s technology unless we expand our vision about what personalization could be and how technology can help make it happen.

True personalization requires more than just looking at achievement levels and trying to compensate for deficiencies. At least three other characteristics of the learner and differentiation of content and process are necessary to give us a more comprehensive profile of student potentials and point us in the direction of making modifications in the learning process. In addition to achievement levels, information about student interests, learning styles, and preferred modes of expression allow us to make decisions about personalization that take multiple dimensions of the learner into account.

This information can easily be gathered and analyzed through the use of computer-generated profiles and from search engines that match multiple categorized resources from databanks containing vast quantities of highly interactive online material. Teachers can use this technology to infuse into any and all standards-driven curriculum highly engaging enrichment materials that can make any lesson or unit of study more exciting, engaging, and enjoyable. Math concepts improve and become more relevant when students use technology to design and build their own roller coaster. Students can gain a greater appreciation and understanding of ancient Egyptian culture when they do a virtual dissection and...
learning, dramatizations, and individual and small-group investigations of real problems. Expression-style preferences can be accommodated by giving students opportunities to communicate visually, graphically, artistically, and through animatronics, multimedia, and various community-service involvements.

The biggest enemies of differentiation are time and the overprescription of learning. Before the availability of computers and the Internet, teachers simply did not have the time to find and direct customized resources to individual students.

Our obsession with content mastery and Skinner’s behavioral theory of learning are slowly but surely giving way to an interest in personalization and differentiation. While it is understandable that our early use of technology was mainly an adaptation of Gutenberg-online and a teaching-machine mentality of what learning is all about, we now have both the pedagogical rationale and technological capability to use the many dimensions of student characteristics that clearly and unequivocally result in higher engagement, enjoyment, and enthusiasm for learning.

Amazon and Netflix know what we like to read and view, and they make use of this information to “differentiate” the material they send us. We can do the same thing to enrich the entire learning environment by capitalizing on a broader spectrum of learner characteristics, creating comprehensive computer-generated student profiles, and using the interactive capabilities of today’s technology to revitalize learning. By so doing, we can minimize boredom and make learning the challenging, enjoyable, and relevant process that it should be.

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