## Inspiring Others

# Looking around: Creating a learning environment (even without a teacher)

*By Kevin D. Washburn on October 3rd, 2013 | Comments(19)*

We sat, afraid to move lest we interfere with the learning and interaction we were witnessing. Children — young children — moved throughout the classroom, carrying various materials while maneuvering around tables with teapots and an occasional flower vase before landing and unpacking their selected treasures. The materials were designed to foster discovery, engage imagination, serve practical purposes, or open new worlds for students. Some did all this at once. The teacher moved intentionally throughout the room, interacting with a student about the materials currently being explored, and then moving on to another mind absorbed in discovery and learning.

After hearing about Montessori education for years, this was my first direct exposure to it. In short, I was wowed. The classrooms were abuzz with motivation. The teachers were accomplished maestros, able to conduct impromptu symphonies — in part or full — as they sprang up from student insights and inquiries.

But the most thought-provoking aspect of these classrooms was the environment. More laboratory than lecture hall, the settings posed questions and provided tools and trails for discovering answers. I was tempted to quit observing and jump into the rich learning taking place. The classrooms conveyed an unmistakeable message: environment matters!

I've spent years refining my teaching based on neurocognitive research, but I've given the environments in which I teach far less study and attention. My visit to a Montessori school reminded me that an optimal learning environment promotes exploring, thinking, and creating — whether the teacher is in the room or not.

Here are a few questions I'm now asking myself:

**Are there objects within the learning space that capture interest while fully engaging learners in exploring critical concepts?**

Every classroom should have books (see Question 2), but sometimes the mind learns better in more physically active ways. Remember the Rubik's Cube craze, launched by a toy designed "to help explain three-dimensional geometry"?[1] Children and adults — possibly one-fifth of the world's population in the mid-1980's — spent hours a day handling and thinking about how to solve the colorful and confounding puzzle. Every twist prompted a new challenge or success as young minds worked to solidify all six of the cube's sides. The relationships between the sides of a cube had never before captured such attention and thought.

In Montessori classrooms, the materials were often less complex in construction than the Rubik's Cube, but they proved equally engaging and thought-provoking. They were simple enough to use but still intriguing in the ideas they helped children explore. Many simultaneously occupied hand and mind.

**Are there ample materials to spark individual exploration, learning and mind-enriching entertainment?**

I'm old enough now that students from my first years of teaching — fourth-graders — are adults. Several have found me via social media and a few have met me for lunch when I've been nearby. Almost every one of them remembers one thing about my classroom: books! I was inspired by a college professor whose office looked like a great children's library, and I set out to give my classroom the same feel. The longest wall in the classroom held its windows and my book collection. In those pages, students discovered the inhabitants — and food — of Redwall, met children who sneaked gold past Nazi soldiers via sleds, and were shocked by the literal and metaphorical wolves of Willoughby Chase. The environment was rich with potential, and many students who came into fourth grade thinking they didn't like to read went into fifth grade possessing a rich background in children's literature. While I did what I could to stoke such interest, it was the presence of the books in the classroom that made the difference. They allowed students to wander, to wonder, and to discover worlds on their own.

**Is there a sufficient variety of materials to allow students to process material in self-selected ways?**

Technology is great. It connects us to resources, and even experts, around the world. It's incredibly mobile, available and almost intuitive to use, and yet … sometimes human energy rather than battery power fosters better learning.

I recently taught a course focused on merging what we know about learning from neurocognitive research with the potential represented by wise use of educational technology. In one activity, the participants follow a sequence of actions to construct new understandings of a recent historic event and the background of one individual who played a significant role in it. Throughout the activity, the participants are free, invited and encouraged to use any technological tools they'd like, for any purpose, and at any time. After all, the purpose of the course is to get teachers comfortable in using technology more widely in their classrooms. Throughout the search for related information, phones, tablets and laptops are the center of activity. The same is true when the participants reach the point of producing evidence of their learning. However, in between these activities, the tool-of-choice shifts. During processing, the overtly thinking-centric steps in the sequence, most participants turn away from their screens and make a beeline for more "traditional" tools. Paper, pencils, chart paper, markers, crayons, sticky notes, index cards — these are tools most still reach for when thinking is the target activity. This proves true regardless of age. Young teachers, the early twenty-somethings, and experienced teachers, the beyond-twenty-somethings, prefer a utensil other than a phone in their hands when they need to sort out new knowledge and examine it for patterns. Eventually, the sorted facts and discovered patterns get presented to others via technology, but when cognition is the thing, other tools prevail.

This is NOT to say that no one uses technology to sort information. In fact, a few do — or at least they start that way. I've witnessed several young teachers begin with a phone or tablet in their hands only to abandon it when they realize the "traditional" tools promote greater efficiency and flexibility, and possibly improved thinking.

Sure, technology has a place in the classroom these days. But when choosing materials to have on-hand within the learning environment, remember that sometimes the mind prefers to process ideas with a pencil (or crayon, or marker) in-hand.

In “Unthink,” artist and writer Erik Wahl reminds readers that in childhood we were free to sculpt our “days into works of art…filled with joy, enthusiasm, and fulfillment.” He explains that we operated that way because we needed to be “mass collectors of information,” because we were “cross-training for the many scenarios life would eventually toss at us in rapid succession.” For such training, we needed environments that were “rich, vibrant, and imagination-fostering.”[2]

Our classrooms should be environments that equip and enable such cross-training.

Look around. What is in your learning environment now?

What should be there?

What could keep learning happening with or without you being present?

*Kevin D. Washburn (@kdwashburn) is the executive director of Clerestory Learning, author of instructional-design model Architecture of Learning and instructional-writing program Writer’s Stylus, and co-author of an instructional-reading program used by schools nationwide. He is the author of “The Architecture of Learning: Designing Instruction for the Learning Brain” and is a member of the International Mind, Brain and Education Society and the Learning & the Brain Society. Washburn has taught in classrooms from third grade through graduate school.*

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