

## Dr. Jean Lave on How We Learn

by Ed Petrick and Jessica Royer Ocken

No matter what our society seems to emphasize, the traditional classroom is just one place where people learn. Learning actually happens quite a bit differently than you may think.

According to Dr. Jean Lave, a social anthropologist, learning isn't just a matter of acquiring new information. It's not a linear, start-to-finish process. It's complex and hands-on—made possible by the people around us, our surroundings, our culture, and our desires to participate in different everyday situations.

“Learning is a process of change through doing, practicing, and engaging in life with others.”

— Jean Lave

Lave, who has degrees from Stanford and Harvard and taught for 43 years at University of California at Berkeley and Irvine, has spent many years observing and documenting learning around the world. While earning an interdisciplinary PhD in social anthropology at Harvard, Lave took a job in the University of California-Irvine's School of Social Sciences in 1966. Her colleagues were anthropologists, sociologists, social psychologists, and cross-cultural psychologists. One of them was psychologist Michael Cole, who had been doing research in Liberia, West Africa, related to schools and learning. When he returned, he asked Lave to read the book manuscript he and his colleagues had produced.

“You're the best there is at doing this,” she told him after reviewing his writing. But she also told Cole she believed he was drawing conclusions without fully understanding his subjects—the difference between an anthropological perspective and a psychological one. Cole listened to her appraisal and suggested that if she could do it better, why didn't she? Lave eagerly accepted the offer, Cole purchased her a ticket to Liberia, and she “bounded off” to do field work, she recalls.

Lave's goal in Liberia was to focus on the local, native learning processes embedded in the culture. So she settled in with a group of tailors and over the next five years observed and documented the way they learned their craft as apprentices. She created experiments to compare this to the way people learn and solve problems in a traditional school setting.

As she drew near the end of her study, Lave sat straight up in bed one morning and burst into tears. Something was terribly wrong. In all her months of observing, she'd never seen a tailor in the tailor shop solve a problem the way she'd asked them to in her experiments. In a momentarily devastating revelation, she realized that the way people solve a math problem for a test in the classroom and the way they solve it in the midst of a

“Only learners can learn.”

— Jean Lave

sewing project are quite different. Not only did the tailors learn their craft differently than they would have in a classroom, they applied their knowledge differently. But rather than give up, Lave not only got out of bed, but returned to Liberia for another full summer of field work, observing more intently and now thinking critically about the very methods and theories used to evaluate and study learning.

Apprenticeship-style learning is considered inferior by many academics, she explains, because it isn't school. “Where are the grades? How do you evaluate this?” But instead of being evaluated solely by others, the apprentice tailors she observed evaluated themselves. “If you see that you can do something you didn't used to be able to do, and you can articulate that for people less skilled than you—or just recognize it—that's evaluation by the learner,” she explains. “And that's often far more powerful than evaluation by others.” The tailoring apprentices didn't get grades on a pants-making test, but they did grow more and more autonomous in their work, and eventually they made items well enough that people were interested in buying them.

After this discovery, Lave came home triumphant, certain she'd be able to convince experimental psychologists and educational academics to consider learning in all its forms and fashions. But it soon became apparent that this would be a battle. Persuading entire fields of study to shift their foundation would be no easy task. Instead, it turned out to be her life's work. And though she has often seemed to be traveling against the current with her ideas, she is not the only one in history to reach these conclusions about learning and problem solving.

Dr. Maria Montessori, whose name may be more familiar, also observed that learning involves *doing* (not just being told) and is a process unique to each person. Trained as a medical doctor (among the first women to graduate from University of Rome's medical school in 1896), Montessori observed and taught children in Italian insane asylums

for more than two years, taking copious notes about which methods and activities were most engaging and useful. Though the children she worked with made great strides, the Italian government denied her access to public school students, so she created her own schools, first in Italy and, by the 1920s and '30s, around the world. Montessori's carefully organized classrooms, filled with her "games" and "puzzles"—hands-on activities designed to engage children in the process of solving problems and teaching themselves—are today found in private and many public elementary schools in the United States, as well as schools around the world.

Though their conclusions are very similar, where Montessori founded schools, Lave has worked to impart her findings by teaching education researchers. For 10 years at Berkeley (until 2002), Lave created and ran a PhD program for social and cultural studies in education, graduates of which have gone on to do serious work toward changing education. These 60 or so PhDs include Tony Smith, a past superintendent of Oakland Schools; Laurie Olsen, former head of California Tomorrow and an expert on immigrant education; and Susan Shepler, Associate Professor of International Peace and Conflict Resolution in the School of International Service at American University. "There are now a number of other people around the country with PhDs who do not think the way they're supposed to think about schooling," says Lave, with a smile in her voice.

"I follow Jean's model in my own teaching," says Shepler, who recently studied connections between formal education, the state, and armed conflict in Nigeria. "She modeled wonderfully how to let the research process be loose enough to allow for innovation and surprise, and that ethnographic knowledge comes 'from your bones'." Shepler says she draws daily on the Lave-ian perspective that learning should be considered separately from schooling. "We should not assume that schools are only about learning, or that learning only happens in schools," she explains.

Whether teaching young students or equipping adults to help educate others, Montessori and Lave have drawn similar conclusions about learning processes and how they can best be encouraged.

Traditionally, learning is thought of as a matter of acquiring information or knowledge, says Lave. And from this perspective, the "learner" is almost always considered as an independent individual and the learning process as a way of getting needed

knowledge into this individual's head. "What Montessori does, and I try to do, is start from the other end in several respects," says Lave. "We recognize that learning occurs through participation in a community of practice." And a "community of practice" can be any situation where people are working together on a continuous basis, their ongoing activities are interdependent, and various participants arrive and replace one another over time, Lave explains, noting that this covers most aspects of our everyday lives at home, at school, and at work. In this sort of community, participants learn both from their differences with others around them and from their common projects, she adds. "Learning is not a matter of individuals acquiring [knowledge or skills], but of participants—all learners—changing," Lave continues. "And they change differently. It is through participation that we change and grow."

Ultimately, people learn by doing, these scientists have concluded. And "doing" always involves others, whether that's literally working in a group and picking up techniques and information from those around you, or mentally considering the broader implications of your task as you work on it alone. Within this framework, teachers become not just someone imparting information, but someone who creates possibilities for the learners in their charge to learn and participate in the way that's best for each of them.

"Any time a child learns something from another child, it has more power," a colleague of

Lave's once told her. Part of good teaching is making these moments possible.

Yet in many ways, our approach to education—including the ways we reward standardized test results and the data we use to decide which institutions receive funding and which kids get into college—may be doing all of us a disservice. This is what thinkers like Lave and Montessori have been trying to say for years. After all, as any kid who has memorized a list of facts to pass a test (then immediately forgotten all of them) knows, there's remembering something for a while, and then there's *learning* something, really finding your way to understanding, to knowledge, and to solving the problem you find before you in the best way you know how.

"It is by participating in the everyday production of all sorts of projects—work, play, family—and the ways we connect them across our lives that we change our practices. That's the source and substance of what I'd call learning."

— Jean Lave

Dr. Jean Lave is the author of several books on how people learn, including the co-authored *Situated Learning: Legitimate Peripheral Participation*, which grew out of her research on Liberian tailors. She holds a BA in anthropology from Stanford University and a PhD in social anthropology from Harvard University. She has received American Anthropological Association lifetime achievement awards from the Council on Anthropology and Education and from the Society for Psychological Anthropology. She is currently retired as a professor, but continues to write and lecture around the world.



We gratefully acknowledge the Oak Park-River Forest Community Foundation's support. January 2017