

## Learning as Transformation: Resourcefulness and Renewal in Higher Education

Richard P. Keeling, Keeling & Associates, LLC<sup>1</sup>

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### Abstract

Liberal education is both emancipatory and transformative. Learning that changes the mind also changes the micro-anatomy and function of the brain. Students learn as whole people—the mind is never separate from the brain and the learner—and they learn always and everywhere. The whole campus is, then, a learning community, and campuses should be resourceful in depending on and preparing both teaching faculty and professional staff to support and inspire learning. Transformative learning inspires both inquiry and change; good teachers of all kinds encourage students to reflect, question themselves, and tolerate the discomfort of new ideas.

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The promise of transformation differentiates the purposes of liberal education from those of more mundane—and commonly overrated—cognitive activities such as memorizing, out-of-time and therefore just-in-time studying, and cramming to pass exams. Embedded deeply in the idea of college as a learning experience is the belief that the person who graduates should be somehow different from the one who first matriculated—and different in more ways than merely having a degree, or, for that matter, a job. No institution of higher education that is conscious of its own potential would write a mission statement that said its purpose is to graduate students or grant degrees. The point of controlling access to a valued (even if no longer scarce) credential such as a baccalaureate degree is that the credential must be earned, because it represents something that cannot—and should not—be simply purchased. Even universities that have suffered (and, unfortunately, encouraged) the assaults of a consumerist view of higher education would dispute any assertion that their degree is a product, the eventual ownership of which is guaranteed through the timely payment of tuition and fees.

### Learning: Liberal and Transformative

College should be about learning—and learning may, but may not, correlate with grades, academic persistence, and graduation. Staying in school does not, in and of itself, signify learning. Learning is nothing trivial: it represents the continuing synthesis of internal and external worlds by a mind and brain hungry to have, and make sense of, a variety of experiences. Imagine a metaphorical factory of learning on the boundary between knowledge and experience: there, learning manufactures meaning and generates a succession of closer and closer approximations to understanding. Given its access to knowledge about the self as well as the world, learning creates channels and pathways for transformation; new knowledge and experiences initiate iterative processes of questioning, changing, or affirming existing perspectives, opinions, priorities,

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<sup>1</sup>Richard P. Keeling, leads Keeling & Associates, LLC, a strategic and international consulting practice in higher education, serves on the Board of Directors of the Council for the Advancement of Standards in Higher Education (CAS), and has been president of four professional organizations. He edited three sequential major publications that focus on improving learning: *Learning Reconsidered*, *Learning Reconsidered II*, and *Assessment Reconsidered*.

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relationships, and even identity. College should be full of those opportunities; students should feel repeatedly challenged to test and revise their points of view.

Undergraduate liberal education, then, should literally change one's mind over and over again—introducing new patterns of thought and action, forcing the reconsideration and revision of beliefs held tenuously or tentatively, inviting the parallel intellectual sensations of wonder and uncertainty. One striking conclusion of the developing neuroscience of learning is that the changes and challenges of learning as a broadly developmental process have sturdy neuroanatomical and neurophysiological correlates. Stated too simplistically but to make the point, learning can rewire the brain, and the person. And that is exactly what we want, and should expect, from college: rewiring. Rewiring is the consequence, and the process, of transformation.

It is in this way that liberal education can and must be unabashedly liberal: it should be liberating, emancipatory, freeing. Liberal learning at its best ensures that the mind can escape the constrictions and bounds of its own history, family, culture, and experience; that it can browse and intoxicate itself with knowledge of the world and the self with open, unrestrained curiosity. The process is at once frustratingly abstract to describe and starkly physical. Learning, memory, and transformation are not just oscillations in the mind; they are the organic stuff of flesh and blood, realized in the plasticity of neural cells, connections, and networks. We can no longer imagine learning as the vaporous infusion of something called knowledge into the unkempt clouds of consciousness; it is hard work, learning, and it engages real tissue in a real organism. Learning is never theoretical; it is always based in the moments and lives of cells fed by blood that has been aerated by lungs and pumped by a heart. Learning consumes oxygen and glucose. When liberal learning transforms, it transforms a whole person—not just that person's ideas, but her brain as well.

### **Learning and Campus Resources**

**W**hat do the neurosciences suggest, then, about the province of learning? It is always and everywhere. Students do not—cannot—leave their brains, bodies, and orderly or messy lives behind when they enter the classroom, start an experiment in a laboratory, or explore the resources of real or virtual libraries. Their minds have those physical and contextual partners as constant companions equally and fundamentally engaged in the process of learning. Even the most abstruse and complex thinking and analysis do not occur in a friction-free environment; the person who is thinking and analyzing is always present, constructing knowledge for himself or herself, making meaning of new material and discoveries through reference to and reconsideration of whatever ideas and facts existed before.

Neither can students segregate mind from body during what we call co-curricular, para-curricular, or out-of-classroom experiences—recreation, conversations, and conflicts in living-learning communities; involvement in service projects; visits to a nurse practitioner at the health center or participation in counseling sessions, as examples. Those are learning experiences too. Mind, brain, student, and learner are one and the same, whenever and wherever. Note, by the way, that the mind, brain, student, and learner do not separate academic and student affairs; perhaps this is the reason why vexing organizational and structural questions that cause dissonance in communities of higher education (e.g., should advising be in the portfolio of the Provost, or the Vice President for Student Affairs?) are of so little interest or pertinence to students.

The emancipation inherent in liberal learning is, then, not limited to the dawning recognition of big intellectual ideas or core concepts that cause delight or despair when elucidated through lectures or participation in today's more innovative pedagogies. Emancipation—and transformation—can arise across the complex diversity of student experiences. To say that the

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whole campus is a learning community is to recognize the extraordinary capacity and flexibility of brain-based minds to learn in any place at any time, but also to acknowledge the potential for transformation to occur within or outside the formal curriculum and to accept an important obligation of intentionality. Making the whole campus a learning community requires every institution of higher education to use all its resources to promote the possibility of a truly transformative and liberal education for every student.

Please note the key phrase: “all its resources.” Resourcefulness in promoting transformative learning demands that colleges and universities affirm the simple reality that teaching faculty cannot do it all—they cannot mediate, manage, or direct all learning for all students all the time. The heterogeneity of learning types, contexts, situations, and locations demands that all administrators and professional staff who interact with students in ways that stimulate questions or reflection and inspire the renewed making of meaning be considered educators and, therefore, assets in responding to the mission of learning.

No reasonable observer of policy in higher education expects teaching faculty to provide clinical counseling services; reciprocally, no sensible advocate for liberal education would endorse the idea that student life professionals should be rigorously prepared content experts in particular academic disciplines. But transformative education engages the whole student, and, given the processes through which it occurs, it produces both cognitive and non-cognitive outcomes. Some of those outcomes are better addressed and recognized in formal academic classes, guided by the traditional structures of curriculum and instruction. Others have their primary resonance in learning communities, service learning, or alternative spring break activities. But many of liberal education’s desired outcomes—critical thinking, for example, or the ability to take the perspective of another—emerge equally from classroom and other learning experiences. Specialization among educators is reasonable; not everyone needs to know, or know how to teach, everything, and some desired learning outcomes will more often result from one kind of educational experience than another. But institutions that seek to promote transformative learning cannot afford to make any policy decision that overlooks or fails to embrace the educational role of professional staff members who are not teaching faculty.

### **Transformation in Transformative Learning**

**B**oth the process and the fact of transformative learning can—and should—sometimes be unsettling, confusing, and disorienting. Challenges to points of view and personal beliefs or attitudes have not just intellectual, but also emotional, registers. Like lake effect snow squalls, the debates, challenges, and different perspectives that inspire rethinking of anything from history to personal identity blow in unexpectedly, lower visibility, and disrupt plans. This sometimes unsettling and confusing process of transformative learning is, of course, exactly what one wants; the squall clears, the dust settles, things look different, and a student changes. No endorsement of liberal education should suggest that it will be always pleasant and affirming; in fact, no liberal education worth its name should try to be. Of course the politics, mode of dress, and communications style of the suddenly aversive roommate cause discomfort; so what? Yes, that speaker on diversity said unsettling things, and yes, the range of religious beliefs among others on campus contradicts any viable sense of absolutes. But everything about liberal learning is about openness to the possibilities for change.

In the end, some students will tough their way through any number of intellectual and developmental snow squalls without seriously or meaningfully inquiring into the assumptions and beliefs that came with them to college. But when college works, students question the entire pantheon of ideas and beliefs they have developed on the basis of received knowledge about

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themselves and the world. Though the amplitude of transformation necessarily and appropriately varies from student to student and time to time, a good college tries to leave no student unchanged.

### Outcomes

And the consequences? As the words “liberal” and “transformative” directly suggest, the result is a free mind in a changed person. The perspectives held by and conclusions drawn by each such freed mind, brain, and learner will vary. Liberal education, when practiced in ways that do justice to its heritage and ideals, counters indoctrination. The idea that liberal education might enforce some single point of view is contrary to the very nature of transformative learning.

Remember, though, the problem of visibility during snow squalls. Students in the midst of intellectual and personal challenges may miss or misinterpret signs and signals. Learning activities designed to open the mind may feel dangerous or threatening, especially when certainty is highly valued. And educators of all kinds—both teaching faculty and professional staff—have their own learning curves and variations in competency about facilitating inquiry and inspiring reflective reconsideration of ideas and perspectives. There are sound and weak learning experiences inside and outside classrooms. So it is that on every campus, commitments to good teaching, organic and rigorous assessment, and continuous improvement of teaching and learning are essential conditions for effectiveness in promoting liberal learning.

The fact that the quality of teaching and learning varies, like the reality that educators of all kinds have different levels of experience and skill, does not make transformative liberal education dangerous or unethical. There will always be extraordinary and ordinary educators, and there will always be excellent, average, and forgettable or poorly executed learning experiences. These variations do not invalidate the need for campuses to prepare and then engage a broad spectrum of teaching faculty, student life professionals, and administrators in creating transformative learning opportunities for students.

What violates the implied compact between universities and their students is not educators’ occasional mistakes or programs gone awry. On the contrary: an unwillingness on the part of anyone who teaches in college to hold students to high expectations, inspire them to reflect, and encourage them to tolerate the discomfort of new and diverse ideas and points of view seriously lets them down. Good teachers—in or out of the classroom—support, nurture, and challenge their students. And it is from the thoughtful and intentional work of those good teachers that each student’s opportunity for transformation emerges.

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