



Learning: The Experience of It

For six years, a research team studied family life and conversation in order to understand why, even with intervention, children of disadvantaged homes could not retain remediation in vocabulary as their counterparts could.

They found that number of words heard at home per hour were 2,150 for a high income child, 1250 for a middle income child, and 620 for a low income child. By the age of 3 a low-income child will have heard 20 million fewer words.

The average verbally disadvantaged child hears fewer than 1/3 as many words. ¹ This matters because it clarifies for us that learning develops over time.

If a child has not heard enough words by the time they are 3 years old it will be very difficult for them to catch up. Vocabulary acquisition, and literacy, will come slower and will not “stick” as effectively as with children who have had adequate verbal exposure. The number of words heard by 3 years old is highly predictive of 4th grade language skills—regardless of intervention.

The researchers also counted the verbal encouragements and discouragements the children received. Projecting from their extensive research, The middle income child will receive 100,000 more encouragements than discouragements, and the low income child will receive more discouragements than encouragements—144,000 more. Further the low income child will receive 84,000 more discouragements than an middle income child.. Meanwhile, the average high

income child will receive 560,000 more encouragements than discouragements, in a ratio of 6:1. ²

We can imagine how the poverty of words and the lack of encouragement affects the young child going off to school? Fear of failure too often causes a child not to engage in learning, when in fact failing is an important and productive part of learning. We all need the confidence to fail in order to learn.

Scientists say that “Learning... is not making *deposits in one’s data bank. It is more like* mixing a new ingredient into the *soup of perception and cognition.*”³ Learning is a strengthening or weakening of a set of neural connections, a relatively slow process, like deepening the groove. While a single event can have an impact, it usually takes many events to have a relatively permanent change in the brain.

Learning has more to do with practice and observation than being told what to do. “Children learn from examples and the brain stores its learning in what experts call “self organizing feature maps.”

If we do not give children a wide variety of continuing learning experiences, their brains will not develop to support skills and knowledge to operate in the 21st century world.

Given the availability of calculators and internet search and media libraries, memorizing facts—which we have thought of as a large part of the early learning process—is now seen as less important than the slow environmental learning that enables us to discriminate, problem-solve, imagine, and make judgments.

Growing up in our modern 1950’s New Jersey home we were grateful for radiant heat in the floors. We’d wake up on a chilly winter morning and would lie on the floor. The linoleum felt warm and delicious against one’s cheek and legs. And, with the heat under the tiles, if you and your brother stood on a chair, especially if you tipped it back, so that all the weight of both of you was on the two back legs, they would actually dig right into that warmed tile making a soft, squishy dent.

This was one of my first science lessons, and I enjoyed it almost as much as learning about bread dough rising by forbidden peeking under the cloth cover and popping the tar bubbles on our newly newly-paved country road. Luckily the bread still rose and turpentine took the tar out of my pants, but the floor was never the same. I was learning to experiment, finding out what I could do and seeing what was happening. Those little experiences, especially when shared and explored, are as much learning as solving a quadratic equation. These experiences are layers that make the next learning possible. And in our need to achieve innovative and complex thinking for the future, the children and we need all the layers, from basic to advanced.

Project Zero at Harvard Graduate School of Education found 98% of 3-5 year olds rank “genius” in multiple intelligences including divergent thinking, this drops to 32% at 8-10 years, 10% at 13-15 years, and to 2% at 25 years and older. Emerson said “The child amidst his baubles, is learning the action of light, motion, gravity, muscular force.” How can we preserve that genius?

We can listen to the child, give space for their thoughts. Ask them to describe the idea behind their art. As in Reggio Emilia learning, where the Italian village sees elementary education as their highest responsibility, we can teach by listening, seeing, displaying their work, finding interest in their minds, providing stimulation, ideas and challenges, by realizing that these children know things we do not know, will build things we cannot yet envision, and that if we protect their potential, through them we can catch a glimmer of the future.

So this is my introduction to asking you each to think for a moment and to write a sentence or two describing any learning experience that comes to mind on the white card labeled “Learning Experience”.

See the packet in your order of service? The first card is for you to write a learning experience. Please write your name, or be anonymous, as you wish. The other 3 cards will be used later.

We are lucky to have 5 educators on board today—Mike, Joann, Lisa, Nan, and Veronica will collect the cards and they will each select three cards to read in addition to their own. And we will gather all of your written contributions to today's service and we will make them available next week online.

Learning: Crisis & Opportunity

In the state of learning, we are in an urgent moment of dire Crisis matched with unprecedented Opportunity.

You may wonder why I use the word “learning” instead of “education”. To me “education” is an institutional concept that describes a process of learning that probably should be defunct. I used “learning” because it is more fluid and less rigidly roles-based.

The good news is that learning is in the news. Everyone seems to be paying a bit of attention, at least for awhile, even though as Sir Ken Robinson says, we educators don't get invited to dinner much.

After 35 years of lobbying for attention to learning, it was an awesome surprise to me last January to be working with NBC's education division and to find that the network, and a variety of foundations and companies were willing to devote a week of programming and many millions of dollars to raising the awareness of the education crisis.

NBC's Education Nation included attendance by governors, senators, mayors and superintendents and TV coverage on Meet the Press with Arne Duncan, Secretary of Education, the Today Show with President Obama, the Nightly News, all the cable outlets with affiliates shooting their own local education news to include and with online coverage and resources developing.

The Education Nation summit kicked off with the film “Waiting for Superman” which animated true and frightening data and told five poignant stories. Though unrepresentative, these stories motivated many to care and to donate. Mark Zuckerberg of Facebook even came and donated \$100 million to the city of Newark’s schools and IBM donated another \$100 million to Mayor Bloomberg to fund a high school in New York —right in front of us!

The bad news is that the U.S. had to fail pretty badly in a number of regards to get the attention and further that the week of shows and the run of the film will not necessarily bring the change needed for the students in our schools now. Neither the film nor the summit could delve deeply into what is needed in schools, where it is already happening, and the ways in which learning today should be considered beyond the mere comparison of U.S. test scores to developed and developing nations.

This week I’ve been gathering about 40 crisis and 40 opportunity slides for you.

More good news: I am not going to read them!

But I am going to give you my synopses, to precede discussions you’ll have with your neighbors in your seats.

A 5 point crisis and a 5 point opportunity recap. **Crisis** first:

1. The U.S. was a pioneer in education globally, now we’ve fallen behind. We are boring our children our children with subject requirements and tests. Our children are using new technologies and communicating in new ways, but when they get to school we tell them to turn it off and learn the old way. We need to listen to them and find new ways to educate.
2. Out of our 3.2 million public school **teachers**, 1/3 leave within their first 3 years, just when they are mastering the job. We need more great teachers.
3. The U.S. is 20th out of 28 dev countries in HS graduation rate. A student drops out every 26 seconds, 1.2 m per year. If the drop-outs for 2010 would have

contributed \$319 billion more over their lifetimes to the economy if they graduated. Our struggling economy cannot afford this drop out drain.

4. Children spend 40 fewer days in school than in China and our kids lose 22% of what they've learned in a year over the summer. We need a new school **calendar**.
5. From the beginning of No Child Left Behind given the level of funding expected to support it, it has now been underfunded by \$71 billion dollars and now lots have children have been left behind. We need more funds, **funding** redesign, or both.

At the same time, the **opportunity** is rich, vibrant and hopeful:

1. We can build a **new model of education** that takes aim at the unpredictable future—and many teachers are already doing it. Cross-curricular instruction, project-based learning and arts integration, are gaining acceptance now that student achievement and retention gains have been proven.
2. Giving the millions of teachers who are teaching each day **world-class instructional tools** can deepen and student learning, work against drop-outs, relieve teachers of mundane tasks, and retain teachers.
3. Proven teacher education models for supporting and rewarding highly effective **teachers** such as the National Board Certification and Professional Learning Communities have emerged and unions are working with districts to create fair teacher evaluation to support instructional advances.
4. New **parent** communications models, student records online via secure school portals, phones and community meetings can enable parent involvement previously impossible.
5. Foundations, corporations, parents, and politicians are realizing that failing to improve learning is **bad economics**, abysmal social policy, and devalues our

Now, we want you to confer in groups of 4 – 2 in front, 2 in back, to discuss your “crisis” and “opportunity” cards—or your own information on the learning situation.

Which of the 4 crises cards in your group do you think is most threatening? Which opportunity brings the most hope? Or do you have other crises or opportunities you think are more important? If so, write them on the back and x out the front. With your group pick the one or two crises and one or two opportunities you want shared with us all.

Our collectors will come by to pick up your cards and they will read a selection, and their own thoughts, to us all. All entries will be available online next week.

Learning Kuleana

The Hawaiian culture and language and Unitarian Universalism hold much in common, and “Kuleana”, that our responsibility is also our privilege, our capability, and our right, speaks powerfully to UU’s in this education crisis. Unitarianism traces its roots to Servetus and the protestant reformation and Universalism traces back further, as you know, to the 300’s around belief in universal salvation. But as a Unitarian Universalist I identify with spiritual and intellectual movements and figures through time who have broken through to support our fundamental values.

One of our key forbears who has directed me towards a life promoting education is Erasmus. Erasmus remained a Catholic, but to me he is an original Unitarian. (And don’t tell me Socrates was not one of us.) **In 1516 Erasmus, the Prince of Humanists**, found scriptural errors in the Vulgate so grave that he went back to Greek New Testament and Hebrew Old Testament manuscripts and created and published a new Latin/Greek version. Erasmus was unlocking priestly knowledge (or error) for study by all.

A recurrent theme in Erasmus's writings is, that true nobility is based on transforming oneself through learning, so that one's behavior is guided by reason, to seek to do the good. This could be achieved by bringing the Platonic method to children, through schooling. Erasmus says...

“Creep not upon the earth, my brother, like an animal. Put on those wings which Plato says are caused to grow by the ardor of love. Rise above the body to the spirit, from the visible to the invisible, from the letter to the mystical meaning, from the sensible to the intelligible, from the involved to the simple”

Through the flowering of Unitarianism in the transcendental movement, Unitarians have insisted on scholarship, on a disciplined adherence to discovering the truth, to the human responsibility and capability to perceive the truth and to the spiritual rewards we enjoy in so doing.

William Ellery Channing, the great preacher said, “Great minds are to make others great. Their superiority is to be used, not to break the multitude to intellectual vassalage, not to establish over them a spiritual tyranny, but to rouse them from lethargy, and to aid them to judge for themselves.”

From Margaret Fuller who taught and wrote while editing the Dial, to Bronson Alcott and his utopian schools, to Horace Mann who believed that public schools should include non-sectarian education on commonly held ethical views, to John Dewey who pioneered “learn by doing” and influenced Sophia Fahs, who revolutionized Unitarian religious education and brought 500% growth to the program— We Unitarians are devoted to supporting each human developing in themselves the gifts they alone have been granted.

In February 1959, at the age of 82, Sophia Fahs was ordained into the Unitarian ministry. Fahs used the occasion to press for more reforms in her own ordination sermon. She dreamed of church schools with at least three-hour sessions: time for dance, for art, for dramatics, and for meaningful spiritual growth. She dreamed of

ministers who had been educated not only in liberal theology, but also trained as progressive educators in laboratory schools sponsored by the seminaries. She dreamed of seminaries that would graduate men and women who had been exposed “to the latest findings” in psychology, and all the natural sciences. We Unitarians have the highest educational level of any American denomination. So we have the capability as well as the legacy to support our Kuleana in this. When we realize that the learning, and thus the future of our children is at stake, many of us mobilize, as exemplified by the local “Save our Schools” movement many of you joined.

Similarly, at Education Nation, Alma and Colin Powell announced their America’s Promise “Grad Nation” initiative to overcome the drop out crisis. The Grad Nation program focuses on Five Promises we should keep to our children. This is Kuleana from the nation’s capital.

That each child should have access to:

1. Caring adults – mentors, coaches, and friends
2. Safe places – to feel safe at school and out of school
3. A Healthy Start – nutrition and health care
4. Effective Education- good schools and attention to personal learning needs
5. Opportunities to Help Others – participation in the community and society

Let’s each take a moment consider the learning crisis.

What is your Kuleana in this?

Please write a few words about it, we’ll collect the cards and share a sampling. Then we will share all online next week.

Closing Words:

In the words of Sophia Fahs...

“Trust the child,

Honor his integrity as an individual.

In all his relationships expect him to grow and as he grows, recognize the process as religious.

Make it necessary for him to be resourceful and independent.

Count on his doing his own exploring.

Teach him how to be open minded and yet not to be as “a reed shaken by the wind.” Finally, have fellowship with him in experiences of appreciation of the wonder and beauty and sacredness of life.”

sermon footnotes

1 Betty Hart and Todd Risley, *The Early Catastrophe*, 2003

2 Betty Hart and Todd Risley, *The Early Catastrophe*, 2003

3 Dr. Gary Woodill’s review of Dr. Manfred Spitzer’s *The Mind Within the Net* April 10, 2007.

4 Davis, B., Sumara, D., and Luce-Kapler, R. (2000) *Engaging Minds: learning and teaching in a complex world*, p. 197