I am a retired university professor and administrator who founded AAEEBL.org, a global non-profit. I worked at 8 different universities over a 52-year career. This Program is my gift to humanity and how this gift is used is up to each of you. I no longer fight the daily academic battles but I am at a point in life where it is easy to see the big picture. This Program, this gift, is dedicated to my 6 grandchildren.

Overture

Abstract: Higher education shapes society’s leaders and they, in turn, shape how society functions, its goals and values. Global human society must change deeply and very quickly to avoid disastrous loss of life from storms, pandemics, drought, heat, fire, sea level rise and other climate change effects. This change must start with higher education so our society – as it moves to renewable energy sources and stops burning fossil fuels – can be sustainable over time. However, higher education was built-out to serve industry so has the wrong orientation for sustainability. It must be “rehabilitated.” A rehabilitated higher education global enterprise, serving humanity for its new era of sustainability – assuming this can happen – will return to the honored position it historically enjoyed.

An advanced species from a planet far, far away, has monitored Earth for millions of years because earth has complex life. Now that the earth’s ecosystem is endangered, a panel of those observers points out that for a few million years, humans lived on the earth as just a part of the ecosystem. The panel says “humans for 99% of their history did not threaten Earth but during the last 1% of their history, they have. Let’s intervene to preserve life there. How do we return humans to their evolutionary roots?”
This scenario is only partly fictional – the final question is all too accurate. Human behavior for 99% of our evolutionary history was marked by cooperation, complex language, empathy, social cohesion, creative adaptation to changing environments, and, of course, survival and population growth. Only in the last 1% of that time – the last few thousand years – did we humans develop the bad habits that led to ecological damage as well as pronounced and often inherited social inequity.

How to get back to the species we were until very recently?

A few facts to frame the argument:

1. At any moment, around 50 million students are enrolled in higher education globally.
2. Graduates from colleges and universities, arguably, shape the nature of our civilization.
3. But, our civilization is threatened by climate disasters and must change course quickly.
4. We can do a course correction if higher education is structured to do so, but it is not now so structured.
5. The “course correction” is to move our society from growth to sustainability, but that change is so fundamental that it must be seen and understood in the larger context of human evolution: never has humanity had to reflect on its own mindless exploitation of the earth.
6. Fortunately for us who are dedicated to higher education, rehabilitating higher education as described here will not only affect how civilization functions but revitalize the whole global education enterprise.

A house that is “re-habbed” is gutted so the interior is made new; it is made newly “able” to serve as an environment. The word “environment” is important for human behavior since we humans are “situational.” We tend to adapt to the “affordances” of our environment – often determined by the technology we use. I am using the word “situational” as it is used in situated learning theory, but extending the influence of the situation, or environment beyond learning to behavior: humans behave as their situation allows or encourages.
We see many words used regarding higher education – reforming, re-architecting, re-designing – but I choose “rehabilitating” because higher education is, as it is structured, a relic of the industrial era, is influenced in its methodology and goals by the mission of serving the needs of industry. Not only is higher education, therefore, not built on good learning theory, but also not built to allow deep enough change to suit this century. It is not “able” to serve humanity as it must in this century. It needs rehabilitation.

The Rescuer

The very structure of higher education is industrial from top to bottom. That structure was modeled on a behavioristic concept of learning appropriate, perhaps, to the industrial-oriented view of reality: human progress through technology. Produce a product – graduates. Knowledge is a “product.” Learning is simply acquiring that product. This is a static, materialistic view of education totally out of line with current ideas about learning as a process. The experience of being in higher education right now, to a large extent is, therefore, to be situated in an industrial mindset, a mindset that is the opposite of what the world needs now.

The changes that humanity must make in this century may well be impossible not because we can’t but because in general we don’t want to. And, even if we humans could find the will to change, do we know enough to run our civilization any differently than we have? My argument here is not that higher education can order universal change, or launch it in the short run, but that we need millions of creative and dedicated graduates to figure it out. The major goal everyone agrees on is to switch to renewable energy sources, but the imponderable is how does our civilization function so it is sustainable once we have weaned ourselves off of fossil fuels? That is a far more complex problem.

A related problem: we should be able to admit, after thinking about it, that our sanctification of “the individual” is disastrous since the collective then suffers; and we should be able to admit that wealth as the final goal for all is equally disastrous as that results in inequality, division, and the destruction of our ecosystem.

We not only need to change how we educate young people, we have to alter our cultural value system and assumptions. Realistically, this will not happen before we are faced with no other choices. However, if we are to preserve at least a portion of human civilization in this century, the place to start is higher education: there is understanding and even willingness in
higher education because it is in trouble now – higher education already
does not have a choice. It will fail in a number of ways if it does not follow
the process outlined in this “manifesto.”

GDP Delirium

When did we all agree that the gross domestic product was our universal
measure of success? Is GDP just the codification of “progress,” that altar
we have worshipped at for a few centuries? What good does it do if the U.
S. GDP is larger than that of any other country’s but we shoot each other
out of despair? Is GDP actually an index of misery, instead of happiness?
Is it an index of how much sacrifice we all must make so holy “profit”
continues unabated?

This is not to say our economic system is wrong – our wealth has also
provided enormous benefits, of course – but it is to question wealth as a
productive and primary human goal, particularly now that we see we have
set a climate disaster into motion as a result. It is also questioning
mindless growth, as humans have always done – we never had to be
concerned about consequences.

And, questioning GDP as our primary measure of success, is also to
question who humans really are – the greedy beings that dominate our
society now, or the highly successful nomadic beings we were for millions
of years. Is the past few thousand years -- a very short part of human
evolutionary history -- an anomaly? And, if so, can we really change how
we function so we humans can have a sustainable civilization if we only
look at our recent excesses and not our historical, and successful, human
traits?

Are we humans adaptable enough to rise to a new level of awareness, to
seek not just mindless growth but instead mindful sufficiency?

How can higher education leaders re-design the global enterprise if they
don’t know who humans are, who their students are, and how they can be
educated (developed) to be better stewards of the earth? If the leaders
are not aware of the evolutionary traits that allowed us to succeed as a
species, but only the distorted traits of our very recent period of excess,
then the leaders are bound to fail.

It is important to know the parameters of human nature if we are serious
about re-designing education: if we believe those parameters are narrow,
as is probably the case given the destruction humans have wrought over
the past couple of centuries (“humans must be evil”), then education
leaders are bound to design an educational process badly aligned with our best and most successful traits – restrictive rather than inviting.

If we collectively believe that human nature is “dark,” then educators will be inclined to design curriculums that feature “treatment” over “discovery.” That’s the wrong design for a time that demands constant creativity and adaptation. For most of our history in evolutionary time, we humans have been highly creative and adaptable. That is the human we must design education for; we cannot perpetuate the religio/industrial influence, an emphasis on correctness, individualism and wealth orientation, allowing it to doom higher education to irrelevance and impotence.

If we do hold on to the belief that the purpose of higher education is to create individual wealth, then we are doubly doomed to perpetuate the climate disaster and human despair. Wealth can be a goal without being the only goal.

For almost all our human evolutionary history, as research in the various fields of human evolution studies suggests, humans survived because of our social skills of cooperation and empathy. Those skills, or traits, are baked into our being. Our ability to create mammoth societies is a demonstration of the power of those traits.

As is also clear, however, the surpluses from agriculture and industry have warped our collective will so that wealth has become primary and mere “survival” is no longer enough for those who drive our society. Now, we all seem “indentured” to the goal of creating massive wealth for a few.

**A Dictator Rules the United States**

We call ourselves a “democracy,” but political scientists point out we may be instead a “plutocracy.” A nation ruled by the wealthy. I think it would be hard to disprove that characterization.

But, in fact, even worse than a plutocracy is the kind of autocracy we actually have: we are ruled by the belief in acquisition of individual wealth. It is the “American Dream,” the Horatio Alger myth, the radical individualism at the heart of our culture.

A dictator can be a belief and in the U. S. the one sacred cow, the one word everyone has to bow to is “jobs” or, in other words, making money.
For decades, the wealth gap has been growing; for decades, technology has opened opportunities for women; for decades “real wealth” has not grown for a large portion of the American population. These are all deeply unsettling trends.

Why January 6? The answer should be “of course January 6.” Why Trump? Of course Trump. Why are we shooting each other? Of course we are shooting each other: the U. S. dictator is harsh. Being poor is harder in the U. S. than in any other wealthy country. Of course there is depression and anger – the American dream is a nightmare for most.

We talked to a server at a restaurant in Boston who is working three jobs so she can support her children.

We are a plutocracy because our society favors the rich. Our society favors the rich because we are ruled by a belief in individual wealth. That belief is why many immigrants come to the U. S. We have the biggest economy but the price we pay is living lives in a society that is mediocre in quality of life. The gap between the “dream” and reality has become too extreme.

This fact is so obvious, it is invisible. Any project is worth doing if it provides jobs. No initiative can be permitted if it costs jobs. No immigrant can be admitted if that person will take a job away from someone already living here. An effort to create a more equitable society is labeled “socialism.” A plutocrat gets elected by calling his fellow plutocrats “elite.” He manages to gift his plutocrat friends with a massive tax break that he, like all plutocrats, claim will make everyone richer.

As long as the holy grail in the U. S. is “jobs,” the plutocrats will rule through their dictator, that very belief.

The plutocrats, led by the Republican party, often inveigh against higher education because they see higher education as “elites.” Yet, higher education serves the plutocracy with its own mindless dedication to “jobs” above all else. Higher education is massive and serves many purposes, but the undergraduate curriculum and the structure of undergraduate education is overwhelmingly oriented toward creating the workforce to perpetuate our dictator, the belief in individual wealth.

When you read that social commentators don’t know the reason for the U. S. suicide rate, the incredible number of shootings, the division, the political deadlock, the homelessness, poverty, obesity, the general collapse of the national spirit, know that these commentators are missing the most obvious reason: how is the U. S. different than other countries? Our
absolute dedication to the accumulation of wealth. It is mass insanity. The Republican party perpetuates the insanity. The most effective dictator is one who is invisible. We think a dictator can only be a person. But this dictator is a form of mass hysteria.

**Humans Are Situational**

Do we have to accede to this hysteria? Are we humans the seven deadly sins (lust, gluttony, etcetera) or are we cooperative and empathetic? Are we the humans who lived off the land nomadically for 2.5 million years after we started making stone tools or are we the humans who devastated the planet? It seems we can be both, but right now as we face possible extinction in the climate disaster, we had better decide if we are “Diogenes” or “Teufelsdrockh” – God-born or devil’s dung – the human duality portrayed by Thomas Carlyle in *Sartor Resartus*. Are we the young men portrayed in *Lord of the Flies* and, similarly, the warlike apes in *2001: A Space Odyssey*?

Are we Hobbes’ humans or Rousseau’s? The humans that need a leviathan state to keep us under control or the noble savage Rousseau imagined?

We have to know who we are if we are to re-shape higher education so that global higher education can create a sustainable human civilization in this century. If we don’t know who our students are – do they need the freedom to create? Or classroom discipline to focus? Who are we educating? If we don’t know and if we don’t know what our mission should be right now as educators, then we are truly stumbling in the dark.

Higher education enrollment down? Of course – we are educating students in higher education as if they are a product and educating them as if we are still in the – more predictable – industrial era.

Who in higher education has switched from microscope to telescope? Who sees the humans we have been for almost all our history? Looking at those leading change in higher education, we’d have to conclude very few see the much larger picture, very few see our past before the period of surplus and excess.

Two words can sum up human history over the past 2.5 million years – I use that date because our learning how to make stone tools started us on the evolutionary path to the present – and those two words are “survival” and “more.” The human goal for almost our entire evolutionary history was survival. But, after agriculture and the industrial era, our goal became “more.”
Now, we must return to “survival.” We can’t use structures, social structures, built for “more” when we need social structures we perfected during our “survival” period. “More” is about competition and inequality while “survival” (sustainability) is about cooperation and equity.

Those who ignore history are doomed to repeat its mistakes – in our case, now, we ignore almost all human history when we lived in partnership with the earth and with each other. To ignore our best selves, who we were for over 99% of our history, is to doom us to continued failure. Don’t educate for our warped present when wealth is an end in itself and has proven to be destructive to humans and the earth. Don’t say higher education’s purpose is “jobs.”

When did we educators agree to produce employees instead of whole human beings? Better to say we educate students so they can have choices in their careers because they are good learners and are centered and socially aware.

Higher education does not serve industry, it serves society. Or, let’s say it serves industry best if it serves society first.

To be clear, “society” means civil society, not civic society as higher education leaders are wont to say – civic society is dedicated to wealth and its perpetuation. Higher education has more than a civic responsibility; it has a much larger civil responsibility, making sure human societies are humane and equitable and, most importantly in this century, sustainable.

Higher education design and, derivatively, social design must elicit evolutionary human traits, not the distorted traits of the past 10,000 years.

We educators need the telescope, not the microscope.

What Carlyle saw and portrayed in Sartor was human duality: we are insanely adaptable and can act heroically or can act murderously. We are “situated” in the sense that word is used in situated learning theory – all learning occurs in and is informed by situations: belief systems, social systems, a location situation, a purpose situation and so on.

Our adaptability -- adapting to situations – is our greatest strength and our most dangerous liability.

Rehabilitating Higher Education
Trait-Aligned Learning

Until the very recent advent of agriculture just 10,000 years ago (less than 1% of our history), humans were nomadic and shared the common goal of survival: if their small group did not survive, they did not survive. There was equity of necessity. The shared goal benefitted all.

But, once humans decided to stay in one place and raise crops, we humans veered away from the “equity of necessity.” We also veered away from the nearly unique traits of cooperation and empathy as we decided we “owned” the earth and, then, a few thousand years later, produced excessive wealth with our machines.

Humans are situational: we can be very “good” but also very “bad.” When we humans all shared the simple goal of survival, we cooperated; when we shared the goal of producing wealth, we instead competed, sometimes lethally.

We humans, once again as in evolutionary time, face extinction; we must once again collectively work together for survival. We are once again the vulnerable biped who is preyed upon by nature, not large animal predators this time but large weather events that put us all at risk of death. We have met the enemy and he is us. The apex predator, humans, is now preying on us.

We must change our culture: we have organized so deeply toward the GDP that our better selves are subsumed and higher education perpetuates the GDP culture.

Compound Crises

Human civilization is in danger. Higher education is under fire. The latter is complicit in bringing human civilization to the brink with its industrial era orientation. The industrial era is over, but higher education remains an artifact of that era. And, it has not committed to re-shape human civilization fundamentally enough to make a difference. Certainly not fundamentally enough to make a difference in time given the climate crisis.

At 20,000 institutions world-wide and with 50 million students enrolled at any one time, higher education can make that difference.

Trait-aligned learning is a simple enough concept -- re-design the higher education experience to align with human traits that evolved over millions of years, not to align with the excesses of the past 250 years.
Human survival depended on these traits:

1. Cooperation within a group (social systems)

2. Ability to manipulate objects in complex ways (tools and technology)

3. Externalizing thought into palpable systems, i.e., language and other derivative systems. (systems thinking), (learning through conversation)

4. Empathy for others possibly stemming from conversation.

5. Ability to specialize and then generalize from specialization (reflection)

We humans were able to use technology within cooperative human systems and build empathetic social groups that adapted to changing conditions. Small human groups agreed on a shared goal: group survival.

Our large human groups, our national societies, now share the goal to maximize the gross domestic product, a measure not of happiness but perhaps of sacrifice. The many sacrifice for the wealth of the few.

Organizing society to maximize GDP is perhaps the most destructive concept of the industrial era. We have gone as humans from millions of years of sharing a common goal (survival) for the benefit of all to sharing a common goal for the benefit of the few.

**How to Reclaim Ourselves**

The most important human traits, then, are complex communication, cooperation, empathy, thoughtful reflection (creativity), and systems thinking. We were not separate, individual, beings, but social beings. Our goal was survival, a shared goal.

The specific technologies that helped humans survive are:

1. Tools -- beginning with stone tools, 2.5 million years ago

2. Language -- beginning 2.5 million years ago, not 50,000 years ago as some claim.
3. Fire -- keeping fire going overnight required a human system, 1.8 million years ago.

4. Cooking -- reduced chewing time from 6 hours a day to 1 hour a day, 1.8 million years ago.

Language is itself a system (grammar) and the other 3 technologies all required human systems to implement and maintain.

The human traits and the technologies co-evolved: social values extended to larger numbers of people as our technologies provided more security and nourishment and therefore added numbers. We were able to create larger and more complex societies because of the tools and our human traits had to evolve to apply to those larger societies.

However, our tools and traits succeeded in their partnership all too well and “surplus” became “excess.” Excess led to destruction of our global ecosystem. We humans do not have an “off” switch. But, we do have an “adaptation” button.

The adaptation needed now is on such a scale as to seem impossible: moving from GDP as our universal measure of “success” to QOL (quality of life). We need to re-claim our evolutionary orientation by developing young people not to be industrial robots but evolutionary full humans.

Our evolutionary traits can lead us to a blueprint for a new higher education structure.

The second basic consideration, after accounting for core human traits, is the entire experience of being enrolled in higher education, not just the curriculum, but the entire experience. Here are the obvious problems once you think in terms of situated learning theory and the current experience in higher education:

1. The individual is the focus of learning design, but humans learn socially and exist socially.

2. Correctness, not creativity is overwhelmingly emphasized

3. Lectures or teacher-led discussions predominate but humans learn best in conversation, a natural human discourse form.

4. Disciplinary specialization predominates at a time when interdisciplinary generalization is urgently necessary -- problem solving
using any research methodology that is appropriate.

5. Seat time is used as a measure of learning with no valid evidence to support such a measure.

To create “learning outcomes” based in a dominant system that runs counter to human traits is a doomed effort (I was part of that effort: https://www.aacu.org/initiatives/value-initiative/essential-learning-outcomes). The entire higher education “situation” -- from a situated learning perspective -- is mis-aligned with human nature as defined by evolutionary traits. We are graduating students who perpetuate ill-advised cultural habits and thinking. Changing the higher education experience so it is aligned with human traits would not only help students thrive in today’s world but would start a transformation of our global civilization.

Humans learn best through natural conversation – the Socratic method, a natural conversation with a goal, based on posing questions. And we learn best through experience – active and authentic experience.

The most delicate issue is whether current faculty can adopt (if they have not already) teaching methods that invite the most learning.

A Trait-Aligned Academic Structure

Trait-aligned learning is an educational/learning design to leverage our evolutionary traits so students will develop the skills and abilities needed in this century.

- All learning is in groups.
- The group is graded
- If a member of the group completes her deliverable, she shares in the group grade.
- Each student is officially part of an enrollment cohort; students are also graded on how well their cohort is doing, based on aggregated eportfolio data. Students, then, get an individual grade, a group grade and a cohort grade. This tri-part grading structure prepares students for life realistically and it also develops a sense of civil responsibility. (This tri-partite structure is, interestingly, also how corporations assess employees).
- All group problems are current and related to civilizational sustainability.
• The mission of the institution is to “create a sustainable human civilization.” This mission is explicit and universal within the institution.
• The design of all learning experiences is based in situated learning theory, the most appropriate learning theory for this new era; humans are almost infinitely adaptable depending on their situation.

Language

I claim -- and others lean toward this claim -- that human language development coincided with toolmaking 2.5 million years ago. The language would have been a combination of visual and aural signifiers that humans would have ordered into rule-bound behavior.

The resulting language would have been necessary to teach novices in toolmaking.

Viewing human evolution as nurtured and powered by language should influence our views of why humans succeeded and how we evolved -- knowing language and communication is at the heart of who we are, language and communication must have a larger role in higher education.

Writing, speaking, reading and all uses of language must be fully incorporated into the disciplinary discourse of all learning experiences. Language is the life-blood of society. We currently worship STEM but that worship is an artifact of the 3 centuries of the industrial era – STEM can get us OUT of depending on fossil fuels, but STEM cannot re-energize civil society, nor, alone, create a sustainable civilization.

It is time for the creativity of the humanities.

Humans as Social Beings

We humans exist within a social network so higher education must recognize this fact through group work, through training in cooperation, and through assessing students as part of a group and part of a cohort: all of human life is organized socially -- family, community, country etc. -- or work group and company or sports team and region -- so why not higher education?

Empathy and Cooperation

Humans are guided by feelings and will instinctively rush to help another human; empathy and cooperation are key human traits. Why does higher education organize, instead, around competition?
Reflection

Reflection means looking at what you are doing or have done and considering merit: is there a way to improve? But, it is also a way to “transfer” from one situation to another -- from specialization to generalization. Just looking for correct answers denies reflection, a primary requirement for a good life.

The eportfolio community offers ideas for reflective practice: www.aaeebl.org (I was the founding president of AAEEBL.)

The structure of higher education was built for the industrial era so is out of step, egregiously, with the demands of the digital era and is poor preparation for the disruptions of climate change. Learning is situated and learning in higher education is now situated in a behavioristic system that works against holistic human development right at the time we need it.

The demonstrably powerful and successful human traits that led to our success over 2.5 million years have been ignored in higher education at a high cost. Let’s re-think and get busy.

How

All higher education institutions in the world need to agree on the mission of the time: build a sustainable human civilization.

All those who teach must dedicate all they do on behalf of their students to develop their evolutionary social traits: the purpose for teaching must ultimately be to restore civil society.

Benefits to Higher Education

Moving to trait-aligned learning will re-vitalize higher education and place it, once again, at the center of society.

The “book” on higher education is that it’s too expensive (it is), promotes “wokism,” is perhaps irrelevant, and is elitist. My own “book” is that higher education is stuck in 1950. No, make that most of higher education. The most hopeful trends in higher education globally address anachronisms in the system. Higher education, it would seem from these trends, can actually make the transition to Trait-Aligned Learning.
But it can’t if the whole institution doesn’t change in its business assumptions, its mission, its commitment to civil society (civic society is not enough) and to the future of humankind.

What I say in this article is part of an emerging consensus that measuring success by profit has reached its end but what I say goes beyond agreeing with an emerging consensus: I identify what I believe is the cause for our perpetuation of the GDP delusion. The source is the experience of being in a higher education system that, by its very structure, perpetuates a GDP society. We can’t talk our way of our fix, we have to design our way out. Use situated learning as our guide, use the human baseline of successful traits, and re-design higher education so we graduate holistic trait-aligned graduates consciously working toward a sustainable human civilization.

A Million Points of Light

Human civilization needs a million university or college graduates each year who are prepared to solve problems toward the goal of creating a sustainable human civilization. Our civilization is not sustainable as it functions now. Moving totally to renewable energy sources will not, alone, make us sustainable. We need to make the far more complex and massive transformation to a society based on our evolutionary traits of cooperation and empathy.

This transformation is incomprehensible which is why we need a million enlightened graduates each year from now on to carry it out. The Program for Human Rescue as described here and at The Last Humans site does not provide a silver bullet or a quick solution, but a way to gradually transform our global culture, its beliefs, goals, myths, values, and patterns of behavior. It must be a culture where social good is as powerful a motivator as individual wealth; it must recognize that a strong society makes for quality of life while striving for individual wealth makes for widespread misery.

Climate disasters are inevitable for a couple of centuries as our global ecosystem re-balances while atmospheric CO2 dissipates. University students and graduates will often have no choice but to help deal with these disasters. We can all hope most people survive the disasters and that those disasters will accelerate the effort to create a sustainable human civilization that is not addicted to wealth above all else, and that, instead, brings humans back to their legacy of cooperation and empathy.