

# **Chicano Confidential: The Future of Higher Ed,** **Part I**

## **Pandemic Exposes Widening Gaps for Latinos in Higher Education** **By Armando Arias**

*This essay is the first in a three-part series in which the author, who has consulted in the founding of universities in the U.S. (mostly in Aztlán), Japan, Mexico, Europe, and Africa, argues for higher education to re-think and re-structure the old way of teaching, learning and administrating by post-secondary institutions. He recommends the use of evolving means of instruction, made highly feasible and necessary by the onslaught of a world pandemic: evolving technology by which young people can be taught anywhere in the world and new ideas in organizing the “enterprise,” a broad term for any complexity of disparate parts whether in the building of a passenger jet or in the sharing of knowledge. The driving principle, he says, must be the student and as a child born of Chicano activist parents, he insists that Mexican American and Latino youth must be given full measure of attention and opportunity. The traditional university is on the way out and learning wherever one lives will be the new model.*

### **PART I**

It’s curious how Chicano art causes me to experience new revelations about an endless variety of topics of social inquiry. Take this painting by a Chicana artist who early on contracted the Covid-19 virus and during lockdown painted a series of portrayals of her lungs, both capturing her illness and sick lungs in one artwork and her lungs cleared of the virus.

The artist continued to paint during her illness and says it helped her heal to do so.



When I look at the sick lungs, the B/W drawing, I see a systemic design: everything in the human body is strategically linked to the lungs for the purpose of breathing as well as sustaining life in the body. In the field of sociology that would be referred to as “structural functionalism.” Enter an unknown and unexpected integer, the C-19 virus, and the lungs become sick, the immune system starts working on overdrive and searches for solutions but to no avail, at least not for now, and the future is not looking too bright at the moment.

This is the analogy to higher education, much like religion as Karl Marx observed, we as a global society have come to believe in higher education to such a degree that we forgot to design an antidote, a viable solution in case anything ever went wrong. As we in the Academy search for

solutions to the problematics caused by the pandemic, we must come to the realization that in order to find a solution to developing an antidote, we must first search, define, and prioritize new values and beliefs to drive the research necessary to envision viable and sustainable solutions for how henceforth higher education will “get done.” We must turn all existing beliefs about higher education on their heads—in essence, the pandemic has done this for us.

Currently, the veil of objectivity has provided a paradigm for looking and believing in higher education such that we do not question the values and meaning of those values. We don’t question the bench work of professors and we don’t question decisions administrators with no experience in out-of-the-box thinking make, yet this is what we (people of color) need to watch closely as we take the hand coming in out of the fog and develop new ways of knowing higher education, new ways that provide solutions centered on serving ALL people in more equitable ways.

Face it, just look around. We are void of leadership with the type of skills necessary to address the issues the pandemic has caused in higher education that will lead to new meanings and values in higher education. There is no real paradigm in sight, nor are there leaders in higher education on the horizon with the insight necessary to lead us into the type of change necessary. We need a present-day Jorge Klor de Alba, former president of the University of Phoenix and The Apollo Group, maybe we can pull him out of retirement and pull him out of Brazil. Or, maybe we can locate an honorary Chicano like John Sperling, founder of the University of Phoenix, to provide us with a new paradigm for looking for solutions to the problematics that the pandemic has created for higher education.

It was not that long ago when John Sperling presented a vision about the future of higher education and it moved beyond the technology from the start. He had Latinos in mind. Sperling’s vision was to level the playing field and serve ALL people....little did he know that today his non-traditional university would end up serving educationally underrepresented people in a manner much better than traditional institutions of higher education (IHE).

Even after the U.S. Department of Education’s efforts to close down the university due to nothing more than political pressure from traditional large-scale IHEs, today the University of Phoenix should be moved to the front of the line for their paradigm for looking at and applying teaching and learning. Let’s just say that the pandemic is shedding new light on non-traditional ways. Briefly stated, the University of Phoenix is the best at what they do, namely online education, and they should be recognized for it. Plus, they serve people of color at both the undergraduate and graduate levels in respectable ways; this is due in part to the early leadership and vision of Klor de Alba.

Even as large-scale traditional systems of higher education (California State University and University of California) were suddenly forced into the arena with the real experts in online education (University of Phoenix), the traditionalists afford them no credence, no kudos, nada; this has now become the unspeakable truth. This is why our societal values must change, and they must change now in giving non-traditional IHEs the recognition they deserve.

We can start by no longer stigmatizing people of color who earn degrees at non-traditional

colleges that are fully accredited and by-and-large produce more PhDs of color than all other IHEs combined.

The analogy to art, the image of sick lungs, for example, represents the stark reality that we can build systems, large-scale systems of institutions of higher education and they have the appearance of truth but the reality is that these systems are in many ways “sick” in a manner similar to institutional racism, by design, you might say. The point is that as societal values change, traditional IHEs will become obsolete at a faster pace. It should be noted that this can be exacerbated by further infusion of technology by administrators not fully aware of this possibility.

Beyond that is simply ignorance on the part of individuals who make decisions about technology and do not understand the impact their decision-making has on people of color, for example, on such concepts as access and equity. Moreover, traditional IHEs offer slow and/or never-changing degrees that poor students pay big bucks for, yet they are not taught how to leverage their degrees and navigate through the rest of their lives, unlike well-to-do White students. The following is a case in point.

I once attended graduation ceremonies at UCLA’s School of Business in honor of a friend’s son earning his bachelor’s degree. At the end of the ceremony, he stood with his best friend to take pictures. When we finished my friend (a starving Chicana artist) handed her son an envelope containing a crisp one hundred-dollar bill. She was so proud. In the same moment, her son’s best friend (a White male student) was handed an envelope by his father, a highly successful businessman who had earned a Masters of Business Administration (MBA) degree from UCLA—it contained a check for one million dollars. All at once, this caused a visceral response in me that was all too familiar: it reminded me more than ever of the GAP—the gap we are all too familiar with in American society.

For many Latinos, earning a degree from UCLA’s School of Business is like a miracle. More than likely, they have been first-generation college students, maybe a Dreamer, and with parents who had never set foot on a college campus and were poor, like my parents. We were so poor that we used to pile through cow dung at the “hides” where my grandfather worked, a slaughterhouse meat packing plant in National City (San Diego) in search of beans. Yeah, frijoles! A cow, even with its system of stomachs can’t digest beans, so we would pick them out, boil them up and have fresh frijoles borrachos.

This is but one example of why Latinos within the realm of the pandemic are not freaking out. We know how to survive, but it’s this type of thinking that needs further transformation. We also need to learn how to thrive in a world made of structures designed by people who rule our society. Navigating life in a White man’s world takes skill, know-how, persistence, and fortitude, *ganas*, as we say. This represents a huge gap. Having a mentor, whether it be a parent, uncle or friend, places a student at a huge advantage over “mentors” who have never set foot on a college/university campus.



Now, take the colorful painting of the lungs by artist Alejandra Oseguera. They represent good health. Healthy lungs taking in air are bright and beautiful. They have the appearance of truth because they are the Truth—la verdad. De Colores!

Take a closer look. These lungs are not an illusion; they are not fake; they came from the heart and soul of a sincere and trusting Chicana artist. This is a beautiful self-reflection of an immune system that overcame a terrible and horrific virus. The beauty of the lungs at the same time represents the great fear the artist endured.

When Latinos graduate from college, it is a beautiful experience for many, but making their way through the university experience they often do not have the type of support that is supportive of their journey. My father, for example, was supportive because he kept saying, “mi’jo, you have to go to college,” even though he did not go to college.

The online teaching experience causes new realities for how to support educationally underserved students and we need to focus on addressing a “pedagogy of the oppressed,” a la Pablo Freire for online teaching and learning. Again, here, too, is an institutionalized insensitivity gap, a tragic overarching gap, between the ongoing rhetoric, almost all of it repetitive in various language constructs over the last 100 years, if not more, and the reality that our society is experiencing a widening gap between rhetoric and reality in American life and politics.

Now, at a time when the Covid-19 virus has caused a major cognitive shift in the manner in which we construct our reality in everyday life, would be an especially good time to look around in higher education and identify a diverse group of genuine bridge builders, because the more extreme the divide, the harder it will be to construct viable bridges so needed in times of crisis. An integral factor in the widening divisions within our communities of color and American society at large lies in the world of higher education.

The pandemic has exposed one of the most profound gaps in higher education, that between the rhetoric and reality of our educational enterprise, the aspirations of our system versus its current results (outcomes). Even as we weave hopeful narratives about the role of higher education in the world that is unfolding, we must acknowledge and, more importantly, attempt to bridge the gulf between where we are, and where we would like to be. This is important, because I believe that for better or for worse higher education played a role in bringing us to this place, and higher education must play a role in moving us forward.

My question is, does all of education have what it takes in ability, character, and dedication to meet the demands of this next and crucial phase of the development of all of education, including our colleges and universities, and at the same time remain mindful of educationally under-served communities?

We have reached a point where talk will no longer do. Plans and various kinds of tinkering are all good in their place, but there comes a time when performance—genuine, solid, work-produced outcomes—is required and that time is now to focus on closing these gaps. As César Chávez would say, “Si se puede!”

**PART 2 FOLLOWS NEXT WITH DR. ARIAS ARGUING THAT SMALL STARTUP CHICANO COLLEGES CAN BE MODELS FOR FUTURE HIGHER EDUCATION.**



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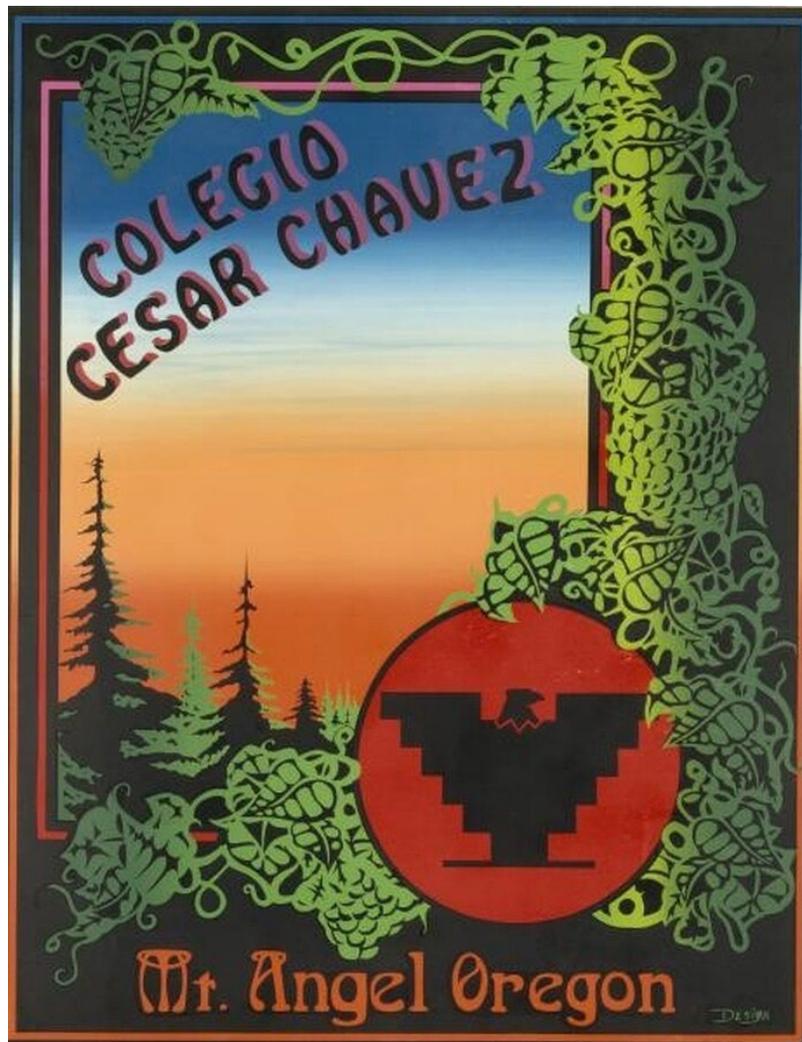
# Chicano Confidential: The Future of Higher Education, Part II

## **Small Startup Chicano Colleges: Models for Future Higher Education**

By Armando Arias

*The lessons learned from Chicano college start-ups provide a strategy for using Enterprise Architecture and Systems Engineering as tools for restructuring higher education.*

### **PART II**



Artist Daniel DeSiga, 1975. © Smithsonian American Art Museum, Gift of Tomás Ybarra-Frausto.

César Chávez always seems to be nearby, guiding my thoughts. I have after all inculcated his values and beliefs into my own; I'm keenly aware of the impact his values have on the manner in which I construct my reality in everyday life. César's values are exuded in everything I do, especially in special projects like starting brand new colleges and universities.

Due to the COVID-19 virus I have been in lockdown in Salem, Oregon, just 18 miles from Mount Angel, Oregon, home of the former Colegio César Chávez as my son recently located here from inner-Portland. Because I want to save lives, I stay at home, think and rethink. There are endless reasons the lockdown has been problematic, for me, because I want to visit the physical plant of the former site of the Colegio César Chávez. I want to walk the halls, I want to touch the walls, I want to walk through the rooms where the Andrew Parodi Family lived at the Colegio in their capacity as groundskeepers. I have an affinity to this reality as my family served as the groundskeepers at Frances Parker School in San Diego where my sister and I were the only students of color and we spoke only Spanish. I want to feel César's spirit as I know he left spiritual DNA behind on his visits to the college.

I feel like conducting an in-service workshop about the STEM movement (science, technology, engineering and mathematics) to the Benedictine sisters who run St. Joseph's Shelter in the building where the Colegio once operated. They are innovators in education in their own right as they have long believed that our institutions of education are failing us, so they may find my new book *Theorizing César Chávez: New Ways of Knowing* (2020) interesting. I am quite willing to conduct such a workshop as I feel the need to make amends with Benedictine sisters (Sister Julissa in particular) given my rocky relationship with them as a youngster.

I'm reminded of how they are concerned about taking care of Mother Earth and that just like César Chávez they want to see her healthy once again. Similarly, in his latest book *First Lady Pope*, Pulitzer Prize winning author, Victor Villaseñor, was once invited to meet with retired sisters and priests to discuss his book and like me, he was hesitant for reasons related to corporal punishment, but he went anyway and was pleasantly surprised because he learned to forgive. Victor's message is that "modern civilization has lost its connection to nature and the understanding of our natural, loving Feminine Energy which nurtures all life." This is precisely how César Chávez felt and the precipitating factor why I founded the Big Sur Environmental Institute in writing a vision statement while infusing his values.

I feel an existential pull to discover the realities behind Colegio César Chávez. It's like the time I climbed the Temple of the Sun at Teotihuacán; when I made it to the top, I was rendered speechless knowing that I am related to this wonderful civilization. I thought, "What an honor." I experienced a true sense of place, as I do amidst the concrete spikes in Chicano Park that are driven into the heart of our community. How else can I explain it?

I feel both César and Diosito tugging at my coat tails, I can hear César now as he is speaking to me from above as he often does and his voice and message is clear, "Go take a look, Sonny Boy, go and see what you can learn, go talk to the founders and/or the graduates of the Colegio. You know how to start universities/colleges, Sonny Boy, you've been doing it your entire career; there is an opportunity to serve out there, started by the pandemic, there is opportunity to help educationally underserved people of Aztlan, go and check it out and get back to me, andale!"

I am more than aware of the heroic efforts of founders of the Colegio César Chávez (1973 -1983) as they were an inspiration to me and my colleagues when we founded the InterAmerican College in National City (South San Diego), California, with a Chicano ideology and vision. I observed their efforts from afar, as I found the idea of a Chicano college quite fascinating, and it has remained as a grand value in my work.



*Pictured at center is Dr. Armando Arias in his capacity as a co-founder of the InterAmerican College during the time the school received full accreditation by the Western Association of Schools and Colleges. Photo by Patricia Arias.*

When I observed the numbers of Chicano graduates from the Colegio César Chávez, comparatively speaking, I became aware of the numbers of Chicano graduates throughout the American Southwest at state supported institutions of higher education like the University of New Mexico, New Mexico State University and the New Mexico Highlands University in Las Vegas, New Mexico. The insight at the time was that in 1978 the Colegio granted more degrees to Chicano students than the sum total by the University of Oregon and Oregon State University.

Now just stop and think about that for a moment. Here is this small, relatively obscure institution in a rural German-American historic town outside of Salem, Oregon, and they were successful at garnering federal funds to build a campus and fund academic programs that led to full accreditation. Moreover, their statistics for graduating Chicanos/as were competitive with large state institutions; it didn't make sense to be sure, but it did reveal the realities of this former Confederate State.

I can't tell you how disappointing it was to hear that in the early 1980s the Colegio César Chávez was becoming more-and-more heavily scrutinized by the regional accreditation body to the point

that even though they earned accreditation, they were simply not financially sustainable. Just prior to closing, the Chicano icon José Ángel Gutiérrez was being considered as President of the Colegio, but the timing was off.

Why is it that the Colegio came under such close scrutiny that they had to close their doors, compared to the scrutiny brought to bear, say, on the University of Oregon or Oregon State University or other any other state university for that matter? Let's draw an analogy to the current state of play using the overnight adoption of online instruction in higher education. Within the impact of the current day pandemic universities/colleges across this nation (and world) transformed to online curricula literally overnight, yet their online curricula and faculty competencies were not evaluated nor assessed; they simply made the change.

The reality is that non-traditional institutions like the University of Phoenix, Walden University, National University, InterAmerican College and the Colegio César Chávez were and are held to a much higher standard when adopting online teaching and learning than state-supported institutions and it shouldn't be that way; it's simply not right! There remains in American society a stigma. In referring to small start-ups and/or Chicano-oriented schools such as the Colegio César Chávez, American society still attaches the stigma of being a "university without walls."

When we earned full accreditation in the founding of the InterAmerican College (a Chicano college) much of the stigma of online learning had changed. The accreditation body was even inferring that we must incorporate online instruction, state our learning outcomes clearly, and demonstrate how we will reach them, so we hired the best leaders in online learning from the University of Phoenix.

I can say with confidence that the University of Phoenix has the best leaders for designing online instruction. I have spent my career researching online teaching and learning and I founded a highly successful international online consortia called BESTNET with senior engineers from ARPANET, a precursor to the Internet (I nearly created the Internet!), so I have a great deal of experience in assessing education delivery systems. Yet today, in a time of a global pandemic, thousands of public/private universities are forced to adopt online education (mostly 100%) and are not being required to meet the same standards as small private institutions and/or non-traditional institutions of higher education.

Moreover, just a few years ago a national campaign arose against "predatory colleges" that were seen as offering inferior online curricula and false promises like "Get in, get out, and get a job!" For instance, the 80 campuses of the Heald College system in California were defined as a "predatory college" and targeted due to a handful of complaints and subsequently forced to close its doors by the U.S. Department of Education.

What I directly observed in the region where I live was that for Latinos in Monterey County and the great Salinas Valley and 79 other regions where Heald had campuses, Latinos lost out. Heald was located in regions with a lot of Latinos and many attended to earn vocational and/or occupational health professions degrees.

Just look around and see who occupies many of the health professions positions, like

medical/dental assistants, community clinic managers, hospital administrators, nurses and the like; the majority of people in these positions are Latino and trained at Heald College. To be sure, Heald's tuition fees were higher than those at state colleges, but it's only the case if you don't figure in dorm life and food. Latino students at Heald were presented with student loan packages not any different than those presented to students at state colleges, so why then were they targeted as "predatory?" Couldn't the same be said for any state university? Politically, once they started getting accredited to offer bachelor level degrees they became increasingly more and more under attack.

Even today, traditional institutions of higher education continue their stigmatizing attacks on non-traditional colleges/universities; Chicano-oriented efforts in higher education must still grapple with that stigma. For example, state colleges will not hire applicants for faculty positions from non-traditional universities, namely online PhD programs. There isn't a rule, policy and/or law that keeps online degree holders out; it's simply part of the high-brow culture found in the Academy, it's the unspeakable truth, everybody knows but nobody will say, "We don't hire those people."

Having served on a number of hiring committees, when it comes to reviewing applicants (to include Latino applicants) from online graduate programs, I know for a fact that many highly qualified Latinos are being passed over purely out of stigma for non-traditional learning and perhaps for racist reasons as well. Yet, here we are in the middle of a pandemic that forces state institutions of higher education to teach and conduct administrative business in this modality and no one is assessing the pros and cons of online learning—that dialog has been temporarily put on hold. To be sure, we all understand the impacts of the pandemic and rapid social change, but again the unspeakable truth is that we (in the Academy) were forced to make the shift to online teaching and learning overnight, yet the stigmatizing attacks on small private start-ups continues as well as on online degree recipients.

The National Hispanic University (NHU) had similar beginnings as the InterAmerican College and the Colegio César Chávez. NHU became fully accredited, but regardless of a number of sizeable corporate donations from Silicon Valley funders, they could not establish long-term "hard funds" (secure ongoing perpetual funding) to underwrite the university as required by the accreditation body.

At the point where the accrediting agency, the Western Association of Colleges and Universities or WASC, threatened to take away their accreditation (in essence close the university), NHU sold their "accreditation medallion" to a Brazilian Corporation claiming to be "Hispanic" based in Baltimore, Maryland, in turn, stripping the Chicanismo right out of the university. This is one of the important lessons learned.

Conversely and to the point a number of online colleges/universities such as Walden University, Western Governors University, University of Phoenix, Grand Canyon University, United States University, and National University, all begun in non-traditional settings, are doing a better job at graduating Chicano/Latino students. Concurrently, the pandemic has caused and is causing a cognitive shift (perhaps even a paradigm shift) in how higher education is viewed and assessed

by students and their parents in daily life. Students and parents alike are questioning the value and the content of higher education.

Moreover, the statistics for the number(s) of PhDs earned by people of color in aforementioned online graduate programs outweighs that of UCLA, Stanford and Harvard and all other universities for that matter. That being the case, why should Latinos continue believing and supporting traditional models, a la brava, as they are not serving us in the manner in which we support them? Financially speaking, if we were to take the case of California taxes and say take the state taxes Latinos contribute to the State's budget and invest those funds in the non-traditional colleges/universities that are producing Latino degree holders, the meaning of a college education will radically change and this is where we could be headed.

I find it ironic that during a pandemic lockdown, Mt. Angel, Oregon, is calling out to me in this way, a small German-American town with a grand annual Ocktober Fest, we'll have to add Corona, Modelo and Dos Equis beer to the festival. In 1973 Mt. Angel and the physical site of the Colegio César Chávez became the basis for an ABC television series about a town that becomes the nucleus for a post-apocalyptic community that returns to Medieval ways of technological applications.

I am so moved by new paths of discovery about the efforts of early pioneers that planted Chicanismo in Mt. Angel that I am taking all I know about technological applications (far beyond online teaching and learning), and in reflecting on the experiences and lessons learned from the founding of the Colegio César Chávez, and drafting a new pandemic driven paradigm for restructuring higher education.

The spirit of Chicanismo that once captured this obscure historic small rural setting demonstrates the power of an idea, the idea of a Chicano college, will not die; it simply provides a wretched experience to learn from. César's favorite saying about education was a quote from Alberto Einstein, "Imagination is more important than knowledge!" and that is certainly at work here. What you need to know is that another Chicano college is on the horizon, one whose premise is to move Chicano students from dependence to interdependence to independence as community activists based on service and service-learning.

Once accreditation was realized and as part of the sale of the InterAmerican College, we agreed with WASC (the accreditation body) on two points. The first point is that we would keep the Chicano vision statement intact, and the second point was that we would not start another college in the region for at least seven years. Well, the time is up. The InterAmerican College has already submitted a new application to the Bureau of Higher Education.

**PART 3 WILL FOLLOW SOON TO CONCLUDE THE SERIES.**



*Armando Arias* is a professor and founding member in the division of Social and Behavioral Sciences and Global Studies at CSU Monterey Bay and a frequent contributor to this magazine in his column, *Chicano Confidential*. He is the author of *Theorizing César Chávez New Ways of Knowing STEM*, published recently by Somos en escrito Literary Foundation Press, Berkeley, 2020, in which he shares a critical analysis of STEM studies, portraying his views as César Chávez would have had he gone on to earn a doctorate in science. He has served as a start-up team member for more than a dozen new universities in the U.S. (mostly in Aztlán) and consulted on the founding of new universities in Japan, Mexico, Europe, and Africa.

# Chicano Confidential: The Future of Higher Education, Part III

**Higher Education is an Enterprise, A new Kind of Architecture Can Rebuild it**

**To Serve Chicanos and Latinos by Design**

**By Armando Arias**

**PART III**



In the first of a three-part series published by Somos en escrito Magazine, I made the case for how it is that non-traditional colleges and universities are graduating Latino students in greater numbers than traditional universities found in systems such as California's. By comparison as a historical example I pointed out that in any given year when the Colegio César Chávez was operational (1973–83) in the small obscure rural town of Saint Angel, Oregon, the school graduated more Latinos than did the University of Oregon and Oregon State University combined.

As a state taxpayer, I say state institutions need to do a lot better. In this paper I suggest an

overall IT strategy to this end while at the same time moving both IT and instructional systems beyond traditional ways of creating, transforming, managing, and administrating institutions of higher education (IHE) through the use of Enterprise Architecture (EA).

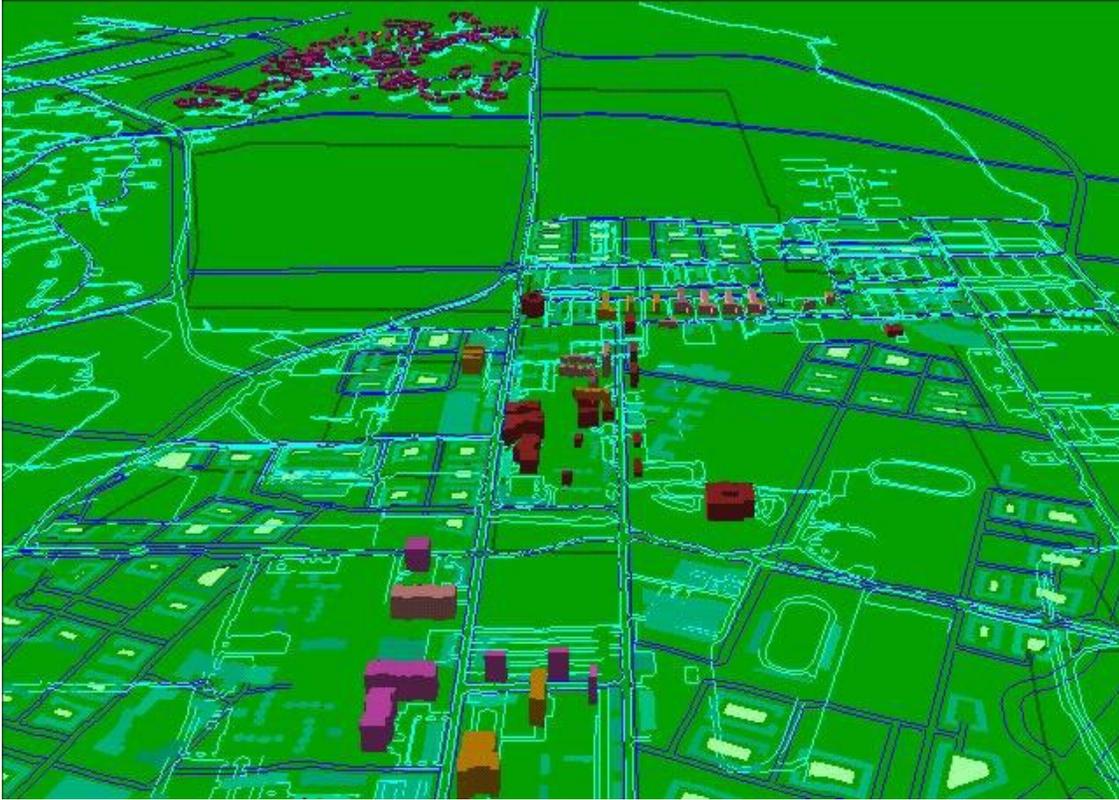
The COVID-19 virus pandemic of 2020 caused a sudden cognitive shift in American society in how it is that traditional state-supported university systems offer instruction by suddenly requiring online teaching and learning almost overnight. The shift to online instruction (namely the utilization of Zoom as a lecturing tool, plus a variety of LMS platforms like iLearn, Black Board, Angel, and Canvas, etc.) came suddenly and the majority of institutions of higher education (IHE) were simply not prepared, nor were administrator (see “The Chronicle Review: University Leaders Are Failing. The pandemic reveals ineptitude at the top” The Chronicle of Higher Education, May 19, 2020, <https://www.chronicle.com/article/university-leaders-are-failing/248809>).

In short, the manner in which the pandemic caused a rapid shift to online instruction is but one example of how institutions of higher education got on with their business of managing their universities/colleges. At the same time and due to the emergency situation there was a cognitive shift away from following policies and rules about which tasks could or could not be completed online (away from the university), especially since physical plants were closed to students, staff and faculty. Interesting to note is that the stigma that was often applied to non-traditional university (i.e., University of Phoenix, etc.) was swept under the proverbial rug, at least for now.

The pandemic also caused a good deal of rapid technological change not just for teaching and learning but especially for how to manage and administrate institutions of higher education. Most administrators were not skilled for rapid change, but nonetheless, we (taxpayers, stakeholders, etc.) need to hold administrators of state supported institutions of higher education accountable for misspending state funds, especially funds related to IT.

In addition, the pandemic has also caused a cognitive shift in how it is that people in America society (and in the world for that matter) think about the value of a college education and more-- this is only part of the point of this paper, as I see this as an opportunity to suggest an even larger shift in how higher education “gets done” through the use of Enterprise Architecture (EA) through a combination of IT and Systems Engineering beyond what most college/university administrators can comprehend.

The point of this paper is to suggest how it is that EA is the most advanced tool of our time to manage rapid technological change today and in the future. Moreover, I will at the same time suggest how IT improvements can remain efficient and accountable to stakeholders (taxpayers, students and parents). Also suggested is a plan for radical transformation of what constitutes an IHE-system and how to better serve educationally underserved student populations.



*This is the first picture we digitized at the start of CSU Monterey Bay in applying Enterprise Architecture (EA) to the transformation of Fort Ord to a university. We called for the assistance of engineers from El Colegio de la Frontera Norte to create an EA model*

Let me be clear in this paper. I am not here to discuss whether or not the shift to online instruction is being assessed and/or evaluated or whether important workload policies are being followed; we can and should take those topics up elsewhere. I am here to discuss new ways of knowing the idea of a multi-university (“thinking university-system”) predicated on the idea of a university-system as an enterprise where all things in the enterprise are linked and connected at all times in real time. With such an EA design, rapid changes like pandemics can be managed in the most appropriate manner possible with or without leadership that can see this vision.

Evidence of what I am pointing to and experiencing in American society today is captured in a series of reports published by The Chronicle Store, for instance:

- How Will the Pandemic Change Higher Education? Professors, administrators, and staff on what the coronavirus will leave in its wake
- The Right Mix of Academic Programs: Making decisions to add, cut, grow or shrink departments and degrees
- The Innovation Imperative: The buzz, the barriers, and what real change looks like
- The Looming Enrollment Crisis: How colleges are responding to shifting demographics and new student needs

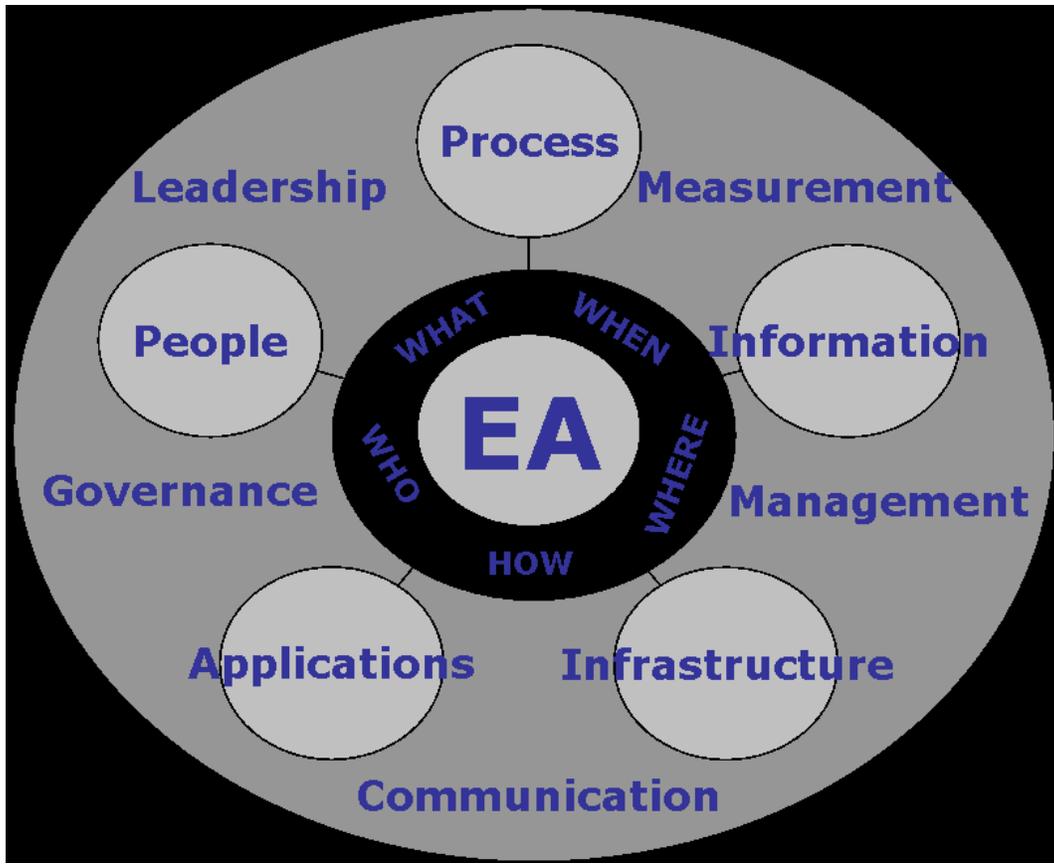
## **University Enterprise Transformation/IT Alignment**

In this paper I propose the development of a capability for enterprise architecture (EA) for large-scale state university systems such as Texas A&M University, Auraria Higher Education Center, CUNY, SUNY, and the University of California, to name just a few. Small private colleges/universities will also be taken into account when suggesting new designs, such as the advent of a Colegio Xicano Virtual. Enterprise architecture enables enterprises (herein: university-enterprises) to fully align administrative planning strategies with the technological infrastructures that support all of them. It facilitates a university-system's ability to communicate with all components that make up the entire system (academic departments, curricula, faculty, staff, students, and community partners, and much more) all at once in real time. At the same time, it will strategically align with whom it interacts allowing boundary-less information flow, more effective decision support and the alignment of administrative, application, data and instructional and university-enterprise transformation, effective communication structures and practices, multimodal communications and the effective management of disruptive technologies. One definition of EA is that it is the organizing logic for all university-systems processes and IT infrastructure reflecting the integration and standardization and/or customized requirements of the university's operation model, again, while remaining aligned with the university's vision statement.

As a recent case in point, let's examine a recent missed opportunity to apply EA. Last year (2019) UC San Diego turned out its first strategic plan in the history of the university; it provides a conceptual blueprint that defines the structure, operation and goals of the university. It is an excellent plan for this vibrant (relatively young) university, however, it is stagnant in the sense that it is not linked to anything. By using EA as a planning tool, the Strategic Plan could be a document connected to its university-enterprise in real time, constantly sensing, interpreting, reinterpreting, adding to and asking "What if?" scenarios of the ever changing landscape from things like budgetary and financial perspectives to perspectives on core values from the vision statement.

What most university administrators don't realize is that their strategic plans are in fact changing as they are producing the document; you might say "the document is obsolete even before it is completed." It's important to note that the same goes for all other planning that is stagnant (not linked to real-time data). This would have been an opportune time for UC San Diego to apply EA to its strategic planning.

My point is that once realized, EA will change the nature of their planning. A major intent of EA is to determine how a university-system-enterprise can most effectively achieve its current and future objectives—in real-time between the relations found in this model.



*(From Federation of EA Professional Organizations, Common Perspective on Enterprise Architecture, Architecture and Governance Magazine, Issue 9-4, November 2013 (2013).)*

“Years ago, it was the idea of Viable Systems Models (VSM) developed by Stafford Beer that first acted as an aid to the practical process of diagnosing all problems in human organizations and helping to improve their functioning. Stafford believes that effective organizations should maximize the freedom of their participants, within the practical constraints of the requirement for those organizations to fulfill their purpose. He believes that the science of cybernetics can be used to design organizations which fulfill these objectives. The VSM is intended to act as an aid to the process of diagnosis of organizational problems, and the subsequent process of organizational re-design. The re-designing process should use technology, particularly information technology, to assist in providing organizations with a nervous system which supports their aims, without the burden of bureaucracy.”

(From Stafford Beer’s Viable System Model: An Interpretation by Trevor Hilder © Cavendish Software Ltd. 1995, portions © Stafford Beer 1985.)

In the past few years only a handful of major university-systems have developed university-enterprise architecture; MIT applies EA across their system, while the University of California system applies it for partial system-wide administration. That is why UC San Diego did not apply it in the development of their Strategic Plan. This is the case because the University of California views EA as topic for research and development as an experiment, if you will.

In a recent announcement, CSU Humboldt predicted such low enrollments this fall that they were planning on eliminating departments (they are basically claiming bankruptcy). California State universities will be experiencing radical change due simply to the psyche of their students, but again, in the brave new world of new innovations that I am suggesting, the traditional educational models are going by the wayside at a rapid rate. EA models are necessary now. Similarly, without federal assistance a number of colleges/universities will either have to make radical changes or close their doors. Restructuring university-enterprise systems utilizing EA could be the answer as it could mean greater financial sustainability.

The UC has developed its own system-wide Enterprise Architecture BoK—Body of Knowledge, as a “repository of assets including guidelines, principles, reference architecture and standards, that have been reviewed and recommended for use. System-wide use of these assets increases the interoperability and reuse potential of technology investments made, thus improving overall efficiency.” In addition, EA involves administrative process reengineering and alignment with the technological infrastructure needed for such improvements. Note: This will prove critical as we prepare for the overall impact of pandemics and new conversion forms of university-systems.

The significance of university-enterprise architecture is demonstrated in moving from the idea of a university that adapts new technologies to a new paradigm for looking at transforming it to a thinking system, notably:

- Transforming the university into a thinking enterprise through the application of Enterprise Architecture as a tool for IT
- Viewing today’s university and its relationship to the regional community as a modern-day landscape or research setting for applied (real-time) research
- Engaging the community through transformation and through prioritizing resource allocations between various competing demands for resources (in-real time)
- Developing road maps for community engagement and service learning
- Developing road maps for leading modernization efforts in this country and beyond (especially in the borderlands)
- Developing road maps for acquiring skills and specialties in the workforce required to operate the university for the future
- Focusing on the university’s aspects for change

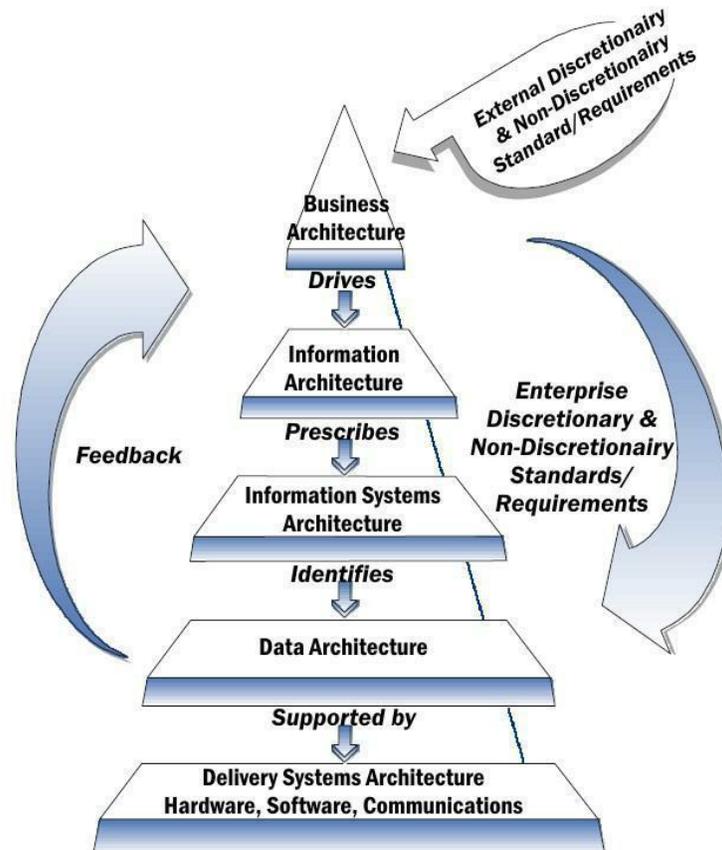
More than ever during the time of a global pandemic, we have the opportunity to rethink the idea of the university and add integrated diversity wherein minds that are connected (stakeholders) administrate behind the scenes through an integrated model for all to see at all times. It is through the application of Enterprise Architecture, IT, and Systems Engineering that act as the infrastructure designed to create real-time “What if?” scenarios that respond to rapid social change, such as pandemics.

From a teaching, learning and pedagogical perspective, I am suggesting a new “thinking university system” that will re-make universities as organizations and institutions into a new form of housing the production of knowledge to be taught to future students. It is important to

note that I am not suggesting that this design be driven by Artificial Intelligence but will also have real-time (live) ongoing input from humans and algorithms based on human behavior. Important to note is that this approach will not employ a business model as is the case of current universities, hospitals, police departments, corporations, etc., but rather an approach that takes into account the real values and beliefs of its constituents and stakeholders.

Beyond providing new pathways for teaching and learning, this approach will assist in downsizing the physical plant of traditional universities, restricting operating budgets, setting priorities in curriculum and academic specialties and most of all finding new modalities for the actual imparting of knowledge in a professor-student relationship, etc. The new innovative thinking university-system of the future (the one being proposed) will at all times incorporate input of actual faculties in defining the role of the future of universities.

Keep in mind that much larger universities (as found in the California State University System) found it difficult to reconcile the new approaches to teaching that were practiced briefly and planned as alternative pedagogical models. In this way EA can assist universities in transforming entire university systems, it can be applied to complex organizations to create “What if?” scenarios that assist each and every stakeholder know how it is they are a part of the university (enterprise) and how they contribute to the overall vision of the university as demonstrated in the diagram below.



(From the Certified Enterprise Architect All-in-One Exam Guide, 1st Edition by Prakash Rao and Ann Reedy and Beryl Bellman (9781260121483).)

EA is vital to all digital transformations and can assist university-enterprises. This design becomes the basis for the idea of a “thinking university” and would definitely call for architecting these new processes, In very much the same manner, I am suggesting that the United Farm Workers restructure their organization utilizing EA (see, *Chapter Twelve: Reinventing the United Farm Workers through Systems Engineering and Enterprise Architecture* in my book, *Theorizing César Chávez: New Ways of Knowing STEM*, Arias 2020).

In that chapter, I point out how I was introduced to EA when César Chávez turned down a rather lucrative offer to help the Boeing Corporation solve ongoing conflicts between union and non-union workers as he was at the height of UFW Movement and could not assist. Instead, I gained insight into how to construct jet aircraft through the use of EA or applying a model that brought together over two million parts, and thirty thousand people to create one jet aircraft.

The problem you may not find comforting to know is that, no two aircraft ever come out the same because parts and human behavior change over the build-out of the aircraft; this is the central idea I borrowed from EA and applied to building out brand new universities as an enterprise unto themselves. Case in point: Boeing could suddenly not acquire copper rivets for wing assembly and had to go to Costa Rica for aluminum alloy rivets; the EA model could ascertain costs, weight, aerodynamic, training factors, labor costs, implications to contracts, and much more.



*A residence hall at CSU Monterey Bay*

EA has advanced tremendously over the years to a point where I began applying it to the rapid build out of brand new universities. The relevance of EA to universities is that:

Systems engineering is an interdisciplinary approach and means to enable the realization of successful systems. It focuses on defining customer needs and required functionality early in the development cycle, documenting requirements, then, proceeding with design synthesizing and system validation while considering the complete problem: Operations, Performance, Test, Manufacturing, Cost and Schedule, Training and Support and Disposal. Systems engineering integrates all the disciplines and specialty groups into a team effort forming a structured development process that proceeds from concept to production to operation. Systems engineering considers both the business and the technical needs of all customers with the goal of providing a quality product that meets the user needs.

(Definition of the International Council on Systems Engineering (INCOSE).)

The benefits of integrating systems engineering and architecture to entire university systems are many. Note: I first learned about EA at Boeing and at the same time met senior members of the ARPANET project, precursor to the Internet. As a direct result I founded BESTNET (Binational English & Spanish Telecommunications Network) and we ran parallel human factor analysis experiments by creating communications knowledge models through DECNET as a tool for computer mediated conferencing, learning and group research and development and working together while apart. A more specific description of this type of work can be referenced in the Preliminary Phase of The Open Group Architecture Development Methodology. For more information refer to:

<http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap06.html>.

### **Advantages of EA Applications to Latinos**

Enterprise architecture (EA) will:

- Take the Latino imagination to new heights and new possibilities
- Cause a new logic, cognitive and paradigm shift in thinking about social injustices in the Latino community that are social responsibility skills and more than encourage community builders
- Impact endowment injustices away from funders that are racist
- Impact endowment funding toward interesting projects involving the Latino community
- Help Latino stakeholders (from citizenry to students and beyond)
- Hold administrators of state supported institutions of higher education accountable for mispending state funds, especially if we define misuse as not graduating students of color in proportion to their standing in their respective regions
- Assist in the facilitation of Latinos holding social sciences degrees to become supervisors of engineers (Silicon Valley) by learning to speak engineering
- Proffer ideas and strategies for implementing Latino studies to stay relevant
- Align offerings with student and labor-market demand data and analysis on the trends and demographic shifts that are impacting enrollment numbers, including the Great Recession, declining birth rates, and a diversifying student population
- Assist colleges/universities to adapt and respond to emerging Latino student needs

- Effectively communicate projections (profitability) about Ethnic/Latino Studies in the future of higher education
- Provide innovation data to stir “What if?” scenarios Engage Latino/Chicano faculty in data-informed decision-making
- Study why financial and demographic pressures have given rise to the argument for innovation in Ethnic/Chicano Studies Programs
- Research the context for waves of higher education reform movements
- Address the barriers to change on campuses with real-time data
- Assist elements for meaningful innovation in the Latino community
- Transforming National City into a thinking city through the application of Enterprise Architecture as a tool for IT
- View the thinking university-enterprise as a modern-day landscape or research setting for applied (real time) research
- Engage the community through transformation through prioritizing resource allocations between various competing demands for resources (in real time)
- Develop road maps for community engagement and service learning
- Develop road maps for leading modernization efforts in this country and beyond (especially up in the borderlands)
- Develop road maps for acquiring skills and specialties in the workforce required to operate the university for the future

And last but not least, create a Colegio Virtual del Pueblo that at the same time acts as a model for restructuring higher education and infuses Enterprise Architecture, IT and Systems Engineering for planning, administrating and instruction in institutions of higher education.

EA is only a tech-tool to be sure, but it is also the most effective tool to date to cause an ongoing sparkling interchange of innovative ideas between very different types of people and start and/or transform institutions of higher education. Moreover, in all of the technological capabilities that exist today there is no better tool than EA to cause a confluence of knowledge.



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