



*The COOK Report on  
Internet Protocol  
Technology, Economics, and Policy*



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# **Building Alternative Pathways**

*for the Creation of Better Education and Neighborhood  
Futures in Kansas City*

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**No road less  
traveled**

Whenever you  
choose the road less  
traveled

You may feel lonely  
for a while

But as you proceed  
You find many  
companions

As there is no road  
less traveled.

## Executive Summary

The question, perhaps for much of America, is whether or not most of our problems are the result of spending too much time focusing on what separates our citizens. With Kansas City located at the heart of America, it appears they are primed to leverage an abundance of resources aimed at inclusion, technology and Internet access. My conclusion is that the resources William Wells has put together could become be the beacon of light that will show the rest of the country how to rally around a new found public good and resulting optimism. Something that we all can respect and embrace.

Kansas City has dozens of nongovernment organizations. Some of these organizations first and foremost demand the loyalty of their members which means most often that you have something which, rather than serving as an increasingly scarce public good, serves as something that is designed primarily to maintain the existence of the organization. The hoped-for public good disappears. If the people involved cannot manage to do this, instead of a widely shared mission, you may wind up only with a search for just the funding to ensure the existence of the organization regardless of how well it functions or does not function and who does or does not embrace it.

William has a history that tells a different story. A generation ago he became interested in telecom and the Internet and wanted to bring affordable broadband Internet to Kansas Cityans. In the black and minority community in Kansas City you have not one but two earlier generations of efforts by black citizens to ensure that their youth received a sound technical education. The first was the W.E.B Dubois Learning Center and quite a few years later the second-generation effort was the organization known as Black Family Technology Awareness Association. Both wanted to create a minority controlled system by which the young black generations could be given sound technology-based educations. Unfortunately neither of these organizations could build up lasting management support given the other alternatives that the dominant society of Kansas City put in front of them.

All of this is played out over multiple generations in the context of the Troost Wall where property deeds based on racial codicils created a situation where neighborhoods

were set in stone and where economically, politically and socially everyone in a given neighborhood became more or less the same. In other words neighborhoods that were economically mixed with both factory workers and professionals no longer had these characteristics. It was no longer possible for a black youth in a given neighborhood to experience neighbors of different economic and educational backgrounds. Life became much more monochromatic in color.

It was a city which - over time - had become dominated by isolated independent NGO empires. The inherent tendency to preserve one's NGO created a situation where preservation took first place and the efforts designed to ensure the preservation turned everything into an empire of scarcity .... I've got mine and you've got yours and never the twain shall meet.

William, over a period of probably about 25 years, has been taking a look around. In my opinion, given what I have seen from the past four years of research and writing, he has arrived at a correct diagnosis.

He has discovered robotics as a means of interesting the youth in technology, but he has not kept to narrow robotics programs alone. He has gone into software design and building of things like robotic race cars. He has followed the leadership of people in this movement who rather than champion competition, preach friendly "co-optition" - that is to say - adherence to a set of goals that accepts and tolerates those working with you and does not insist on a kind of competition where someone "wins" by "destroying" one's opponent. He has anchored one leg of his movement at the Benjamin Banneker Charter Academy and has been searching for neutral territory which it appears he is just on the verge of finding. His goal is an alternative independent pathway. (The road less travelled.)

He has reached out to an innovative group in Los Angeles that for almost 20 years has been using 3D GIS architectural drawing tools and skills to, in effect, teach a cadre of students on multiple levels. After approximately five years, these students have reached a level of expertise where they have been designing, from ground up, the buildings of new community college campuses in Los Angeles. He has seen how HUD — Housing and Urban Development has been working with Los Angeles and with other groups. He is endeavoring to adopt some of HUD's best projects into the environment that he is trying to build in Kansas City.

He is trying to adopt and maintain an open approach -- one that does **not** rely on naming favorites. He is steering clear of any path that will have him embracing one approach and condemning another. ***His goal is to walk a neutral, independent path*** — one that does not claim that group "a" will have an answer while group "b" does

not. He is trying to say to all concerned that “it’s the kids who come first.” They are our heritage and our efforts must be designed with one major focal point in mind that is to enable the kids to undergo challenging education -- an education that they embrace because the system that has been built for them is inclusive enough so that they understand the whole range of positive alternatives, a range of futures that they have never been able to comprehend before.

Now William has been scanning his horizons to identify good programs that would fit into this philosophical approach. And he is finding them. One such approach involves what Los Angeles calls “Encounter Los Angeles” or “Encounter LA” and he has aligned with Michael Rendler and Marcela Oliva, the creators of Encounter LA, to the point where they are planning to come to Kansas City in early November to have the first meeting of a likely series to begin to create and get off the ground — ‘Encounter Kansas City.’

As is explained in the pages of this issue, these Encounter groups are mechanisms to gather people from local neighborhoods and show others in the educational programs that William is gaining funding for how they can join up and use the ideas and techniques to create positive projects in their own neighborhoods.

Now as long ago as the year 2000 William was the proprietor of a wireless network in Kansas City that was designed to bring affordable broadband Internet into areas along the Troost Wall. Economic pressures were such that this first effort did not survive. Even so it taught William a great deal about how to successfully use low-cost broadband Internet connecting technology. Projects developed by Connecting for Good and by Isaac Wilder in the last few years have shown a cross-section of Kansas City folk the importance of affordable Internet access.

What has set Kansas City apart for perhaps the last five years is its role as the foundation point for Google Fiber. This is another very positive piece of the jigsaw puzzle that William is putting together. With Google’s cooperation and indeed, enthusiasm, it is possible to connect with the residents of several Kansas City Housing Authority projects. These projects are being connected to the Google Fiber network as a part of the White House ConnectHome Initiative – as implemented by HUD.

Another very recent project is one called [MetroLab Network](#). These “networks” design shared partnerships between organizations promoting “the public good” - namely city government and local universities.

Again, in this respect, it seems that Kansas City is fortunate because the Economics Department of the University of Missouri Kansas City is one of the most forward-looking in

the United States. Consequently, William is in the midst of building what is being called Urban Innovation Labs which will be located at churches, Housing Authority sites, the sites of other nonprofits and any school that want to move their students educational experience into a real-world 21<sup>st</sup> Century environment. What appears to be a likely outcome here is Google support for setting up a distributed virtualized network of these Urban Innovation Laboratories that are designed to bring in the youth from perhaps grade 7 or eight through junior-college and indeed through the University level itself thus creating an independent alternative pathway for a good sound education acting as an on-ramp to adequately paying jobs in the technology area.

william is offering an extremely innovative ambitious plan that has just really come together between the middle of the summer and the middle of the fall and in my opinion offers Kansas City the most hope that it has seen in several generations. This issue of the *COOK Report* is an effort to - with William's active involvement- explain what it is that he has put together, how it will operate and most important of all, the thinking behind it. However readers should note that I do intend to offer a follow up in the next issue out on roughly New years weekend.

## Chapter One

# Building an Alternative Pathway for the Creation of Better Education and Neighborhood Futures in Kansas City

## Editor's Introduction

William Wells has long been an inveterate problem solver. He has a passion for helping those who find themselves on the wrong side of the Troost divide cope with the problems brought on in minority Kansas City neighborhoods by the likes of Jesse Nichols and urban renewal at the end of World War II. When Boss Pendergast was removed from his control of the Jazz district, the way was cleared for the automobile to move in and reshape the urban and suburban landscape in and around Kansas City. Nichols bought up real estate along the routes chosen for the new interstate highway system and made a huge fortune by developing suburbs with racially restrictive covenants. The housing that he built he successfully marketed to whites by showing that the attached deeds fell under legal strictures prohibiting the property from ever being sold to a black person.

Immediately post-World War II Nichols worked with the city politicians to acquire prime city real estate for the first significant shopping center in the United States and to explain to families living near Troost Avenue -- home to the most wealthy citizens of the "town" that nearby properties were being sold to blacks and they better be careful of what that would do to the value of their homes. With rapid speed, the wealthy fled Troost in the 1950s as the Kansas City Board of Education dug in its feet to resist desegregation until the bitter end.

Cash starved - the quality of the school system plummeted. Everyone who could scrimp to send their children to private schools. Some of those who marched beside Martin Luther King in the struggle for civil rights -- beginning in the 1970s -- worked in Kansas City to develop technology education for African-Americans. In earlier **COOK Reports** (Issue 221 March April 2015, Issue 220 January February 2015, Issue 218 November December 2014; Issue 212 January-February 2014; Issue 211 November December 2013; Issue 207 March April 2013) I have documented the impact of Google Fiber and the first two generations of such movements in Kansas City where the founders modeled what they did on life and teachings of W.E.B. DuBois. The first was Leon Dixon's DuBois

Learning Center and the second George Lewis Walker's Black Family Technology Awareness Association.

Enter **William Wells**. Inspired by the writings of George Gilder on the apparent miracles of fiber optical technology in the late 90s – William developed a commercial wireless-based business providing Internet access. By about 2008 or 2009 that business along with countless other wireless businesses folded. By around 2010 Wells had come to represent **the third generation of Black Kansas Cityians** who were trying to provide a good technical education to the children of black families. In 2015 and 2016, with his aSTEAM Village program, he traveled with groups of students to cities where the National Society of Black Engineers (NSBE) and BDPA formerly known as the Black Data Processors Association were holding their Annual conventions. These travels opened up connections to organizations doing innovative work focusing on connecting inner-city youth with employment career paths in computer science and information technology and engineering.

One work that he found attracted his attention in late 2015 was a 20 city program sponsored by Housing and Urban Development and the Department of Defense. He discovered that Los Angeles Community Colleges had a very long-lived (more than 20 years) program of support for the development and use of architectural tools and geospatial technologies in support of computer-assisted architectural drafting.

By the spring of 2016, he had built an alliance with Michael Rendler who ran the E7 architecture program at 20 or so Los Angeles community colleges. [See our article on this on page 66 of our March April 2016 issue.] Rendler was inviting William to bring Kansas City into the ground floor of that effort on behalf of the Los Angeles led E7 architecture program. This was happening in the spring of 2016. In the last days of August William indicated to me that his plans had progressed to the extent where he would be very glad to have me do my final **COOK Report** of 2016 on the scope of his activities. While William was ready to pursue the overall systems thinking behind the architecture program, awareness of the increased scope of what happened in Los Angeles provided William with knowledge of an increased range of useful organizations and technologies beyond those of the current LA community college architectural ecosystem.

Looking at the totality of what was happening in Los Angeles, William by the summer of 2016 had decided that he wanted to see if he could roll out such a program for the areas of Kansas City served by the robotics programs that he had founded. He had also found out about a Los Angeles-based, community outreach program called **Encounter** that looked like a fertile mechanism by which he could establish and expand a community-based infrastructural organizational development platform in Kansas City.

## The Mission of aSTEAM Village (aSV)

He informed us: aSV has a couple of projects underway or under consideration for funding. The first is Cyversity which is a collaborative project with Cerner, HNTB, Kansas Workforce Partnership, Johnson County Community College, Kansas City Kansas Community College called the Urban Innovation Lab. The second is Encounter Kansas City which is a partnership with e7 Architecture Studios and Encounter LA led by Professors Marcela Olivia and Michael Rendler which has letters of support from the UMKC School of Law (entrepreneurship and technology) and the Housing Authority of Kansas City.

The Urban Innovation Lab is simply a way to connect the student to industry and industry to the student by working on real projects within the community. I like to call it a Learn and Work initiative.

The Encounter is a "Think Tank" that connects the community to classroom and the classroom to the community. This is where the projects are conceived and partnerships are created to take the projects from concept to reality.

Together, the Encounter Kansas City and Urban Innovation Lab function as a way to ensure that the under-served population is able to obtain the skills, mentors/coaches and training needed to participate in the Knowledge and Information based economies of today and tomorrow. What is to be done? Conceive it...Design It...Build It! For more information visit:

- Encounter Kansas City - [www.encounterkansascity.org](http://www.encounterkansascity.org)
- Encounter LA - [www.encounterla.org](http://www.encounterla.org)
- e7 Studio Architecture - <http://m.e7studio.net>

aSTEAM Village has a foundation of two national professional programs that intersect within every company and organization around the globe. Our foundation is comprised of The National Society of Black Engineers and BDPA formerly known as The Black Data Processor Association. The first (NSBE) has a heavy focus on engineering and the second (BDPA) has a heavy focus on computer science and I.T.

Again please visit

- The National Society of Black Engineers - [www.nsbe.org](http://www.nsbe.org) aSTEAM Village was the 2015 NSBE Region V Pre-College Initiative Program of the Year
- BDPA - [www.bdpa.org](http://www.bdpa.org)
- aSTEAM Village is also a regional partner of the DigiPen Institute of Technology located in Redmond, Washington. Much of the talent at Microsoft, Nickelodeon, Pixar, Boeing and

Disney have come through DigiPen which has been ranked by Princeton Review as the 3rd ranked post-secondary school for game design.

- DigiPen Institute of Technology - [www.digipen.edu](http://www.digipen.edu)

**Wells:** The significance of game design and animation ties into our focus on Building Information Modeling (BIM) for the Encounter Kansas City Urban Innovation Labs. The City of Kansas City, UMKC and Kansas University validate that we are on the correct path through their participation in the MetroLab Network which is a university-city collaborative effort in many cities throughout the U.S.

**COOK Report:** Have they invited you into their program?

**Wells:** No invitation as of today, but I anticipate that there is an opportunity for an invitation because we are working on workforce development of the talent needed to run and sustain a Smart City whereas at this point their primary focus appears to be solely on becoming a Smart City see also- MetroLab Network - <http://metrolab.heinz.cmu.edu>

Our students come to aSV on Fridays from 5:00pm to 9:00pm and on Saturdays from 12:00pm to 6:00pm. We have extended their learning by 10 hours a week through collaborative, exploration of solving problems, thinking critically and working as a team.

## Notes from the late August Teleconference

By the final week August 2016, William put together a teleconference of key people operating the Los Angeles Encounter infrastructure to endorse his building a Kansas City-based counterpart.

**COOK Report:** In this issue we explain how he has put together very innovative approaches to building what he calls an **alternative pathway for the Black and Hispanic communities to acquire and implement their own educational leadership for their own children.**

In the remainder of this introductory section are some highlights of the ideas discussed in the "telecon" during those final days of August.

**Rendler:** Marcella's CyberOne document was done as a result of input from an advisory committee looking at and evaluating the impact of her teaching. This has become a regulatory requirement of the college. Marcella initiated this perspective in order to validate what she was teaching. She wanted to make it real for the students. It was from the feedback of her advisory group that she created what she calls the cyber one document.

Her first major realization was she needed to talk about multiple student entry points because, after 15 years of teaching, she had so many different kinds of learners at so many different levels. William is working on integrating the entry points into the technology sector. Moreover, according to Marcela: "in our e7 group we had a lot of focal points looking at the technology sector but we have had a hard time finding people with the right kind of skills needed to really drive this."

**Also**, as she explained, "[ENCOUNTER is a networking and think tank group](#) that welcomes people of **all ages, ethnicity and experience**. Our members meet to find like-minded partners, give presentations, engage in activities and share resources with others. Some have thriving businesses, others are pioneering new concepts—all seek to improve the built environment, with projects focused on architecture, community-development, sustainability and other fields!

**Wells:** I've been trying to adopt a philosophy of seeing those doing good work and then figuring out how we can join with those folk, collaborate with them and extend what they're doing across the nation. Initially, we worked with inner-city at risk kids exposing them to robotics, computer coding, spaceflight experiments and so on. We have made alliances with two national organizations. The first is the National Association of Black Engineers and the second is BDPA — formerly known as the Black Data Processors Association. NSBE.org and BDPA.org.

We are making both of these organizations the foundation of our program because, doing so, allows us to have both the younger students and their parents be able to meet both college students and professionals in industry and invite them back into the community and develop a learning program that we can use as an accelerator. As a result we have the following kind of possibility reaching out to our youth. For example, I'm a 14-year-old but I'm reading below grade level and my early test scores are not what my teachers tell me they should be but I'm really interested in technology and what I'm beginning to see as the possibility of a career in this area.

In such a situation, one question then becomes whether or not we can provide youth like this with an "accelerator" to pull them out of a process that has resulted in them beginning to be left behind. The very immediate question is how can we put them on the path to become like the people whom Michael and Olivia and the others on this call have inspired?

Rather than have our groups compete against each other on a local basis, we have pulled out of the formalized local system here because there is a donut hole left by the volunteer hours on the part of some of the world-class firms here that have been redirected and going out into the areas where there is an abundance of resources rather than where we believe they are so badly needed. The reason why we created the aSTEAM Village was so that we can actually have a program that could apply for those federal dollars and allow

us to be directly in charge of how they are used to ensure they get to the underserved where it is needed and intended.

We will be able to create industry partnerships and national partnerships to get those resources needed to create needed success directly into the hands of the students and their families whom we serve. We've seen some successes but we are also running into the situation that is typical in many large American cities where NGOs have gone out and created their own infrastructure first and then once this is done and installed go out and try to bring at-risk youth to the table as a secondary process. They have created an infrastructure and then dictated how they want resources and dollars to flow without giving the intended recipients of those resources a say in the development of the project.

***So the missing piece of our puzzle is that we have created an alternate path or what I like to call an alternate highway to run alongside the existing infrastructure. Not as an enemy but as an ally. And a critical question becomes "where is that platform we can use to reach out and grab other groups in our community that see what's going on but don't know how to change it." This is where I said "aha Encounter LA is the critical missing piece of the infrastructure that we need to replicate here in Kansas City."***

If you could let us form an Encounter Kansas City as a platform of our own, then we could work with you and become an extension of what you are doing in California - I believe that the result could be a blueprint that could be expanded into other cities across the United States.

**Marcela:** One of the ways in which the Encounters can succeed is for us to make sure that they list projects and opportunities that are relevant to our efforts so that, if someone in an advisory group has an idea about donating any time, he or she can see any existing immediate opportunity. And for example, if someone in our LA Encounter needed a mathematician, they could turn to you for help and at some future point, if you needed help in designing a building, you could turn to us. This is the idea then behind networking all the encounters together with each other.

In addition to all this: CyberOne is intended to be a new kind of catalytic model for education and economic development. It is based on the idea that everyone on the planet has something to contribute and is intended to be the mechanism by which they could do so. [**Editor:** I will refer to this document at various places in the pages to come. It is the summation of the first 19 years of Marcela's professional career in Los Angeles. A long, complex and very detailed document, it is best introduced in relatively small bites. The first Page of CyberOne is pasted in at the top of the following page.]

**Michael Rendler:** Would Brad please enlighten us with regard to the work he's been doing with the county with the PLA and with the ground zero vision and now with faith in action so that William and others can see that Brad was there some 20 years or so before I was.

## Making Sure that Benefits Go Where Needed

**Brad Carson:** For the past 28 years I have been a probation officer in most of the hotspots of LA County and I can say one thing with utmost certainty and that is jobs create peace in the community and no jobs mean no peace. ***My philosophy is rather simple jobs and education will overcome poverty and crime.*** As far as jobs I have a central philosophy and that is you do local hiring especially in billion-dollar local infrastructure projects.

[**Editor** for very useful detail and other references on Brad Carson see the following Google cache file - [file.lacounty.gov/SDSInter/bos/supdocs/82209.pdf](file://lacounty.gov/SDSInter/bos/supdocs/82209.pdf)]

In the construction and building trades industry how we created local hiring was to get a whole bunch of people together on the same page in order to say that anytime local structure was being built we wanted local hiring as well as a set aside in hiring specifically for people on parole and that sort of thing. We act basically is a job coordinator to see this happens. We tied local community groups together and then we wrote a platform saying that every time we build a road, a school or a bridge in short anything that uses our local tax dollars, we want local hiring and we act as a job coordinator to make sure that this happens because there are three basic functions that must occur. One through public policy we create the local opportunity; two we must create job ready participants on the part of the local population and three -- we have to act as the middleman through job coordination with the job ready participants and the locally created job opportunities.

We do this again by having jobs and education in order to break the cycle of repeat criminal offenders. I had to go outside the criminal justice system to create these collaborations and jobs because the system is basically designed to perpetuate itself by locking people up and throwing away the key.

**COOK Report:** Again this is the same basic infrastructure that William is beginning now to create in Kansas City. It is very clear that he's figured out the component framework – the pieces that must be in place and that when they are in place, it seems to be very likely that the constituents of the alternative pathway will see it is quite obvious that it is to their benefit to fully cooperate.

## Chapter Two

# The Encounter: What it Is and its Evolution in LA

**Editor -- in a series of brief telephone interviews in mid-September** Marcela describes and defines the **Encounter**. She explains how it has gone from essentially a one person operation spearheaded by her and kept alive by a handful of volunteers to a situation where others are becoming interested in solidifying, replicating and expanding what she's doing.

**Oliva:** The purpose of the Encounter is to bring the outside world to the classroom and bring the classroom to the outside world. I have been doing this for 25 years and it's been just me by myself. However, I'm very fortunate to be where I am now that it is beginning to get a lot of attention.

I can tell you the template. I can tell you how we do it. However, the fact is that it's been really rather ad hoc and you know there is definitely no "model" of community colleges doing things like this. If there is, it is heavily funded and doesn't last.

For myself in LA I just do it semester-by-semester.

If community colleges do not support what exists they, in effect, proceed at their peril. Consequently, I will be happy to work with those in Kansas City in order to assist them.

**Michael Rendler:** William do you want to tell us a bit about your vision and how you see Encounter LA helping?

**Wells:** I have been working in communications and launching the Urban Innovation Labs here in Kansas City specifically targeted towards participation and inclusion in as a part of several HUD initiatives — especially, the Kansas City Choice Neighborhood Initiative. I don't want to get particularly complicated. I think that the LA model is an excellent one because it's actually in a community that has the same socioeconomic dynamics in which most of my students live. Yesterday, during our kid's robotics classes, I shared your video and it made sense to the kids. There was a student who has been with me for five years and has worked with CAD and all office automation, who turned around and said "you mean to tell me that if there is something I can determine that my community needs that I can define it; design for it; and then get people to help build it?"

The answer is yes and now, at the end of the day, **the outcome I am looking for is jobs and opportunities.**

**Oliva:** Yes.

**COOK Report:** As William explains it, his interest in the HUD Choice Neighborhood Initiative is related to education, on-the-job training, workforce and entrepreneurial development. "The Choice Neighborhoods program supports locally driven strategies to address struggling neighborhoods with distressed public or HUD-assisted housing through a comprehensive approach to neighborhood transformation."

"Choice Neighborhoods - as a program - is focused on three core goals:

1. Housing: Replace distressed public and assisted housing with high-quality mixed-income housing that is well-managed and responsive to the needs of the surrounding neighborhood;
2. People: Improve educational outcomes and intergenerational mobility for youth with services and supports delivered directly to youth and their families; and
3. Neighborhood: Create the conditions necessary for public and private reinvestment in distressed neighborhoods to offer the kinds of amenities and assets, including safety, good schools, and commercial activity, that are important to families' choices about their community." [See: [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/public\\_indian\\_housing/programs/ph/cn](http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/cn) .]

**Wells:** Choice Neighborhood traditionally means developers will tear down public housing and rebuild the community with mixed-use affordable housing.

The transplanted residents usually believe they will return to new housing when the truth of the matter is that without education, on-the-job training, workforce and entrepreneurial development, the residents of these neighborhoods will not be able to afford or qualify for the newly built affordable housing. Therefore, success must be measured by putting these residents in a position of upward mobility, i.e., the resident trajectory must be to go from public housing to affordable housing to private housing. Without training for the economies of today, this will not happen.

The following paragraph [from HUD] contains a more detailed exposition of the strategy behind its Choice Neighborhood Initiative project.

*HUD Strategic Goal 3: Utilizing Housing as a Platform for Improving the Quality of Life. Subgoals: 3A. Utilize HUD assistance to improve educational outcomes and early learning and development.*

*3B. Utilize HUD assistance to improve health outcomes. 3D. Utilize HUD assistance to improve housing stability through supportive services for vulnerable populations, including the elderly, people with disabilities, homeless people, and those individuals and families at risk of becoming homeless. 3E. Utilize HUD assistance to improve public safety.*

**COOK Report:** At this point in time William's reference above to the HUD Choice Initiative is simply to give individuals the skills to be able to be a part of Kansas City's, SmartCity, Entrepreneurial and TechHire Initiatives thus enabling them to participate in or have the capacity to be a force in the Information and Knowledge Based economies of today and tomorrow.

**Wells:** Validation that we are on the right path came during an early October conference call with Michael, Marcela and the UMKC School of Law directors Anthony Luppino and Michael Robak. During this call Mr. Luppino introduced all of us to the MetroLab Network which is a university-city based collaboration with projects in many cities located though out the U.S. We are excited by the opportunities that exist for a progressive, forward thinking institution like the University of Missouri-Kansas City School of Law to be a catalyst and a partner in both the Encounter and Urban Innovation Lab initiatives.

In Kansas City we expect to be leading a MetroLab Network project [described in its own section below] that will inspire like-minded students to take action that would benefit their communities with the support of UMKC, the City of Kansas City and others.

At the end of September, I sat in a digital inclusion meeting surrounded by people from the University of Missouri Kansas City and other NGO groups.

In attendance was a visitor from the UK who said: "when you look at what we do, we are a maker. We take complex things and make them simple and sometimes it is as simple as this – instead of looking at a cellphone right side up, why not look at it upside down? We want to do what we can do and that is to just start doing things."

**Wells:** What we in Kansas City see when we look at your Los Angeles based program is a model that we can replicate here, in KC, and, if we can achieve 50% of the successes that you have had in LA, then we will be able to have a model that other cities around the country will look at.

But more important is that we will have gathered together groups of students that can then be empowered to start solving problems for themselves not because they are fortunate to get an invite to another meeting with another expert but because there is someone like yourself who is willing to train, mentor and engage with them to make their community a better place.

So let's allow them to begin solving problems within their community and, if you can start doing this, not only does the talk and the chatter go away but the results and outcomes

becomes the dominant focus of conversations. The question then becomes one of what can we do to make things better as far as the quality of life and the environments under which they are living. Furthermore, this affects not only them, but also, their younger brothers and sisters as they come aboard.

**Oliva:** Exactly.

**Wells:** And if I can answer the second part of the question, that is why I want to bring Encounter LA to Kansas City. As I sat in that digital inclusion meeting on Friday, there were only three people in that room who could qualify as minorities or should I say, people of color. I was one and then there is this other lady who has an initiative called Urban Tech and one more woman who had been invited to speak.

Consequently there has been **a long history (and Gordon you have documented this) of NGOs who are well-funded and which get together, formulate what they want to do, and then formulate their strategy.** All of this happens while the people whom supposedly they want to work with are never in the room. In short it seems that they are never even at the table until all the infrastructure resources that the project has to spend have been allocated.

**COOK Report:** The diagram at the top of page 17 below is an example of how city departments can play a positive role in working with local citizens like William and University IT people like Michael Robak and Anthony Luppino in sorting out things like the complexities of NGOs in Kansas City. This chart was done by Rick Usher, Assistant City Manager for the City of Kansas City. Rick deserves great credit for being able to articulate in visual form how these organizations have grown like kudzu in Kansas City.

One problem with them is that they become entrepreneurial opportunities that local citizens can create to get funding for "doing good". But the problem is that in many many cases the continued existence of the brand-new NGO is the primary purpose. "Doing good" takes up the rear. If it has any office space and one or two or more staff members the NGO needs income for overhead - income that is very very hard to get. The additional question is who's doing what for what political purposes? And why any city would need more than 90 such organizations boggles the imagination.

From the past almost four years that I have been following events in Kansas City, it has been increasingly clear that it's NGO effort is fragmented rather than unified. The people involved generally have their way of doing things. And if someone else wants to do good work, such a person or group better be ready to deal with a prior history of often bitter disputes between organizations fighting each other like crabs in a barrel for the money that will keep the organization alive.



**Oliva:** Yes I agree with everything you say and I think that the model of the Encounter is such that we know there is an existing model that is out of balance. Rather than reshaping any existing model, the Encounter is about creating a new one that will make the existing one look obsolete.

**COOK Report:** Here is Marcela's official description of Encounter: Encounter LA meets the first Thursday of each month in downtown L.A at Trade Tech College. It is composed of student, faculty and community leaders and facilitates a larger group participation in the making, designing and operating of the built environment, enhancing our relationship to nature. Encounter connects design studios to projects in needed places in communities, creating holistic, sustainable solutions by working from within as agents for economic development and innovation. Personal engagement is key, allowing members to learn by doing.

**Oliva:** It is as simple as getting in the room once a month people from different backgrounds with teachers and students together and then folks will say: in six months we will have a gallery exhibit or in six months we will have something else that will define different projects.

Now all my encounter minutes are very important and I have never had a person who can write minutes of my Encounter LA. It is just this simple. You must get teachers who can make a project that is a part of the community.

Eventually when we have a lot of Encounters, our communities will start looking different and we can write up these encounters on our website. I think I need to make a three-minute video that will describe the encounter is because, right now, we don't have anything.

**Wells:** And the key phrase that I would like for you to hear is that I don't want to spend any time arguing and complaining about a solution that allegedly is in place because such a solution does not necessarily encompass anything that will be helpful to the kids. Instead, I am focused on the possibility created by the outcomes because, as I tell my kids every day, I don't want to spend any time arguing and complaining because that doesn't produce solutions for kids who are growing older every day. I just want to focus on the possibilities and the outcomes because as I tell my kids, we need to know what we agree upon and then move immediately to build on those agreements every day.

## The Encounter Process

**Oliva:** We here in Los Angeles will definitely help you out in Kansas City. Maybe you could have your meetings on the first Tuesday of every month?

I would simply suggest calling it something like design and robotic services by the community and for the community. Another part of the encounter process is that with every monthly meeting we have at least a 20 minute presentation. It can be about technology or it can be about a project within the community. These 15 or 20 minute presentations opt to permit you to get one unit of academic credit for those who attend. We have questions and answers and then always have a half an hour to do analog networking. I think having these once a month will create an opportunity for breakthrough.

**COOK Report:** Given the large number of possible participants how do you keep it focused? How do you keep reasonable boundaries around things such that by means of numbers and force of personalities of those who want it all for themselves, it doesn't become unwieldy?

**Oliva:** One of the things we do is to go around the room and give everyone one minute to introduce themselves. I play a rather strict referee and, looking at my watch, I may tell people: "you have 20 seconds left."

Now of course we do not have the numbers that will allow everyone to do projects. I give the kids an idea of how they can be done and I put requests for projects on a waiting list. Someone wants to create a healthy juice bar another person wants to design and build an urban garden.

I don't have enough resources to do everything that people would like. Perhaps on the faculty side I will get more input from the School of Architecture. And perhaps that this input will result in new services for the Encounter. But right now it is only my classroom.

So everyone says who they are why they are here and in each encounter I always tell them the project we are working on and, right now, we're only working on two projects. If someone wants a project, I make a waiting list So I always ask them to tell us **who** they are and why they're here. They may answer that they don't know that they only just heard about us.

What happens around the encounters without me is that there are lots of people who know each other. Later I find out they don't know each other that they talk to each other and trade business cards and become partners while others might say I want someone to help me build an addition on my house. But later I might find out that these people who did not know each other but who went on to develop a unified business activity where they became partners and they met at the encounter. So the process of the encounter project is very organic. The contribution of the encounter is really very simple. It helps these people find each other. When you want to create something that nourishes innovation and jobs, it must happen with people with multiple backgrounds.

It works because it's made up of people doing these multiply different activities. They are not all policy people. For example, they are not all helping one or more NGOs. They are diverse and out of that diversity can come strength. Now I have been doing this for 20 years but it has been too much single-handed too much on the fly and I am definitely looking for people to function in the role of facilitator.

To handle the curriculum I have to create a database in my brain. I say "okay these are my advanced students they have these kinds of skills and, as a result, this is what we can do." So as an architect I'm trying to think a lot like that. But the first day of these Encounters is super draining.

## What is Needed to Regularize and Structure an Otherwise Random Project

**COOK Report:** Let me ask a couple of questions. Looking at every meeting if you could recapture the highlights of same wouldn't it be a list of who was there and that list would include the introduction offered by each person and be available or review you were someone else at a future date? In addition you would want to have a summary of what projects they proposed all of that window on a website and in a database.

**Oliva:** Yes. On target. Exactly. This is what I have been wanting to do.

**Wells:** Agreed.

**Oliva:** And **what is needed is someone who has had a lot of practice and experience with associative thinking at multiple levels.** In gathering such information puts that need to practice. That was an excellent question. I have been waiting for someone who recognizes the value of doing that.

**COOK Report:** How do you go about connecting people come to these "Encounters" with employment opportunities? **Editorial comment:** as we shall see, William Wells has been designing his operation in Kansas City from the "ground floor up" with employment opportunities in mind.

**Oliva:** More often than not the jobs that come out of the **encounters** are project based. For example I may be an inventor wants to apply for a patent. Such a person might hire one of my students to make the appropriate drawing required for the patent filing — if the device of course is a physical device. Now by definition this would not be a full-time job. However, the outcome is very important because the student, when he or she goes for an interview, would put the drawing and their portfolio and have a credible document to verify their ability.

**COOK Report:** Would you say something in general about the kind of jobs the graduates can get? I assume there would be a wide variety but I've heard criticism that many big architectural firms would say: "oh good here we can get these newly trained people really cheap."

**Oliva:** Yes this does happen and it describes what a drafts person used to be. They can go and work for urban planners for government agencies and of course for the big firms.

I have been doing the Encounter for about 2 1/2 years. Now many of the students were supposed to have advisors. Now many of the advisors did not want to have to come to the college and spend an entire day on such a duty. They thought it would be a waste of time. I noticed, however, that many of them were having trouble using the computer-based tools.

So I realized that the architect who came wanted to learn the technology and I spent time with them teaching use of the tools. And then I realized there were a lot of people who wanted to get design and mapping services. To some extent the Encounter happened as a way to be more efficient. It became a wonderful opportunity for my students to get to know professionals. It is a new model that is kind of hard to explain.

**COOK Report:** Well for this session a final question what about Slate Z is that something that can be safely ignored?

**Oliva:** No not really. This is the last promise. It is in Los Angeles and I'm getting a lot of support for it from my president and vice president. But the promise shown is not necessarily giving people money for the projects. Slate Z has a strategic planning committee to which I have given a proposal about the Encounter and they are supportive of it without so far having any money allocated for it.

The reason that they are looking at us now is that in their proposal and this is something that is kind of what the Encounter can provide.

**COOK Report** on September 15: it seems that the Los Angeles people mentioned so far [Michael and Marcela] have developed a very forward-looking valuable process for whatever reason has never been documented in any serious way. They are now thinking about how they will go about doing this — as well they should.

William your group in Kansas City, also it seems, is thinking about how to develop similar rules of engagement. This makes total sense to me. Now there is a great deal of effort that has occurred in Los Angeles but never been documented. Perhaps one question is the extent to which you can do this after the fact. You can capture some of it as stories and you can experiment in putting these stories into some kind of a retrievable database.

But in my opinion, if you start developing too many rules and making these rules a part of your newfound culture, you will likely find that they become arbitrary, and that there are things about the culture of Los Angeles that probably will not smoothly adopt to that of Kansas City. Comments?

**Wells:** I agree! Furthermore, when you realize that the truth is that no one knows what the jobs of tomorrow will look like, the unleashing of the artistic and creative juices and ideas of individuals combined with a laser sharp focus on individual mastery of the basic reading, writing and math skills will ultimately determine the global competitiveness of our country. The final piece is inclusion...NOT DIGITAL INCLUSION...just plain ole inclusion. If everyone is included, the digital will happen organically.

The companies that have diverse workforces from top to bottom [are 40% more profitable than companies without diversity](#). *Why is that?* Simply because when you have the ability to look at problems from many different, creative viewpoints then you are able to come up with several solutions to solve the problem. At the end of the day, a business and an entrepreneur are successful and still in business because they are able to; a) solve a problem better than anyone else and as a consequence people, organizations or companies are willing to pay for their solutions and b) innovate and enhance their solution that made them successful in the beginning. If you do not have a diverse workforce, you will not be a sustainable company because the economies of today and tomorrow will enable a small, lean, diverse and progressive company to compete because the world is their market and the Internet is their super highway to transport their goods and services.

Make sense?

**Note from the Editor as we go to “press” This text is from Rick Usher, Assistant City Manager Kansas City, on October 31, 2016 and used here with his permission.**

**Rick Usher:** I have been a supporter of Williams efforts both in helping him build his network of connections that have helped him grow his programs and in identifying projects where the City could provide funding support. The first was the SSEP program where by the City's participation, students were able to send the experiment to the ISS. aSTEAMvillage at the Lincoln Building is using one of the Google Fiber Community Connections and we support the concept of connecting other schools and partners to the network William is building. Just recently, I introduced William to our Chief Innovation Officer Bob Bennett and Kate Garman of the Office of Innovation. We are now working to introduce William and his concepts to our other smart city partners. The City is also sponsoring the NSBE conference and funding the SEEK programs coming with it. NSBE is a conference William was able to attract to KC. He is doing amazing things and his efforts are joining and being joined by a number of parallel initiatives.

## Chapter Three

# Thoughts on Urban Leadership and Digital Inclusion

**Editor:** As Encounter LA came more into focus, we asked William Wells to explain from his point of view how he intended to move forward in Kansas City.

**Wells:** At e7 Studio Architects, Michael Rendler and at Encounter LA, Marcela Oliva, are heavily involved in digital inclusion. They have been doing their inspirational work for over 25 years. They have created an inclusive ecosystem that is building the kind of future in LA that I would like to encourage in Kansas City.

I reached out to them because quite simply, I am a little frustrated at all of the Digital Inclusion committees, ***panels and events that are held without the participation of the excluded community***. And furthermore, held with the excluded folk never having had a seat at the table during the early planning. I'm tired of these excluded communities never being given a voice that has value and is heard when decisions are being made by the sponsoring organizations from concept to implementation. I see Encounter Kansas City as a way to formulate an alternative pathway where the people who are excluded can create their own road to help themselves and have a say in what is done.

Gordon: My belief is that eventually, the success of Encounter Kansas City under the leadership and guidance of Encounter LA will attract others who really want tangible results, outcomes and true inclusion. Once inclusion happens, the digital will happen and then and only then will you have "Digital Inclusion." The first step is inclusion and that does not mean, just convening meetings within alleged urban core areas marked as zones of the Digital Divide.

Our focus at aSTEAM Village is working with youth and their families with the output being STEaM education and jobs, where the people to whom we are giving the skills can then do some decent work inside the community.

There are a bunch of properties in urban areas here in Kansas City that are blighted, there are food deserts everywhere and so you have to have science and math and tech skills in order to participate in what needs to be done and generate revenue. Jobs equal peace in the community.

And a lot of the poverty is sustained because of the system and you cannot think you're going to sit at the table with the system and be able to accomplish anything because the cards are stacked against you. Just because I have the skills to go and work at a company doesn't mean that the company in question is going to hire me.

If you can't see the career possibilities, you can't be hired because you cannot pursue what you can't see and the best way to keep somebody under control and keep them isolated in poverty is not to let them see such possibilities.

So the question that Michael Rendler always asks is, "if I am 18 to 29 years old, I have been passed through the school system, given a diploma, but my reading, math and language skills are at a an 8th grade level or lower and I don't have a job. Where do I go to get my second chance? Who do I turn to after the reality sets in that I was indeed not prepared to be an active, gainfully employed citizen in today's economy and society? If I go and turn to a Workforce Development Organization to get work, do they have a staff that that is knowledgeable about the skills needed to get me into the workforce? Do they have a pathway to a high demand career for me?

If I am a youth and I want to accept the opportunity presented to me by a summer jobs program, then is it unreasonable for me to feel that I should be able to get a summer job where I can obtain some skills relevant to the world in which I will have to live in in order to survive? One would hope that their summer job would be one where they can get paid for picking up skills that enable them to go back to school with some fresh learning that has relevance to what inspires them and motivates them to work harder in the classroom in order to better themselves.

Unfortunately, some of the students get summer jobs where they get paid for doing nothing or very little and as such, well intended programs then become more about an organization pushing numbers for dollars and compliance as opposed to being a workforce development initiative for the community. In such a case you have poverty being sustained and fueled by a system that is leveraged to benefit the organization instead of the constituents they serve!

If you give me a job by putting me someplace where I don't do any work but I still get paid, then you are basically empowering me to think: "Okay, I'm earning eight dollars an hour to be on a job where I do not have to do any work and I am not gaining any skills nor knowledge. Furthermore, it is obvious that they do not care about me as a person. Am I being exploited? Am I just a number ? Why do I have my high school diploma, only to find that despite having my high school diploma, I am being placed in remedial classes when I enter college because I am reading, writing and doing math at 8th grade levels?

Wouldn't you be angry, if you found yourself in this boat at age 19? Now, I find myself unemployable and now, I also have to acquire debt to get brought up to a level where I

can succeed and on top of all that, I have to work a minimum wage job just to survive. On a daily basis, I am taking on more debt than I am income. This reminds me of a tug boat in the middle of the ocean with a hole in the bottom of the boat.

The sad thing is that you have people who are actually in a position of power, where they could actually help and do something extraordinarily good for humanity but all too often, for reasons I don't understand, they don't choose to do good. Instead they settle for pushing numbers for dollars on the backs of many people who really want to live a better life.

## LearnKey

One example of this is a Computer and I.T. Certification Training software called LearnKey which we introduced to one of these Workforce Development Organizations (WDO) that sent Jerome and Marquan to aSTEAM Village. LearnKey is headquartered in Utah. I have a long standing relationship with their company through another guy in North Carolina for whom I was doing some software development work.

I introduced LearnKey to this WDO and explained how they could use this software to train their constituents and they bought 500 licenses from us. We gave their managers three different training sessions and I would say after nine months, they had given out very few of the 500 acquired licenses. This means that many people who came their way were not even offered the option to access LearnKey.

Now **this** is the true Digital Divide! It is not about access to the Internet, it is about access to people and organizations that are knowledgeable about existing pathways. Even more importantly, access to organizations that are willing to help you move up the ladder and honor your self-defined charters and missions.

Of course, with the opportunity to put everyone, regardless of race and socioeconomic status, on a level playing field for whatever reason some organizations revert to marketing, bells and whistles that lends itself to pushing numbers for dollars, instead of using dollars to build up a workforce to build a healthy, prosperous community.

Now if you buy LearnKey at retail cost from their website you would pay the retail price per course. However we got a really good deal from LearnKey because of our relationship and our intended use of serving at-risk youth, under-served families and young adults. Essentially, we paid a minimum fee per license for access to the entire library of courses as opposed to paying retail cost for only one course per license. We extended this offer to the WDO at a further discount as we thought we were entering into a partnership.

The retail cost per person for LearnKey is broken down at this URL - [http://www.LearnKey.com/product\\_new](http://www.LearnKey.com/product_new) Our cost for a bundle of 1,000 licenses was \$10 per license for one-year access to the entire library.

The local WDO purchased 400 licenses from us in June 2015 at a price of \$40 per license for access to the entire library and we also threw in 100 licenses at no charge for use by their employees as a professional development incentive for internal operations. Thus we received \$24,000 from the WOD in July of 2015 which the proceeds we used to host our annual STEAM Summer Camp for Kids with field trips, workshops and daily meals.

When there was a competitive grant application and TechHire grant released, the WDO went directly to LearnKey, got a quote, said that I/aSTEAM Village didn't provide them support which was not true and they made an agreement to purchase LearnKey directly at our cost of \$10 per license from the distributor. That was disheartening because being a program already under-resourced, we could have lost a competitive edge in the education/workforce development arena to the same organization that we naively thought would be a partner, despite many warnings from others in the community that this would be the outcome based on historical relationships and interactions with this WDO.

Despite telling us that they would be renewing their licenses, which they did not, instead they sent a P.O. to buy directly from LearnKey and cut us out as a middleman. Wow, wouldn't it be nice if we could bypass the local store and buy our vegetables directly from the distributor at wholesale cost. What would happen to the local store? Would they be in business?

Fortunately, LearnKey is a great organization and they will stand by us and I know that the access to the software and the development of the local tech workforce will still come from aSTEAM Village. Just because you have a hammer, receive money to buy a hammer, doesn't mean that you will be able to use the hammer to produce anything of value. If you do not really know the function and use of the hammer, eventually, you will just put it on the shelf, unused, which then harms the very people who need you to use that hammer in order to build shelter for their families.

It will take more than a great online self-paced learning system to retool America's workforce. It will take a well strategized path with other tools working in concert with the self-paced learning system and most of all, knowledgeable persons who are committed to the retooling of America's workforce and education system. Now with LearnKey, and championing our work and success as their work, the WDO was awarded a \$5 million grant and the truth of matter is that from June 2015 - Feb. or March 2016... the WDO used very few of the licenses nor did they provide the licenses in mass to their clients who come to them looking for jobs and training.

With all of that said, it is a system, we can't do anything about nor does it benefit us as an organization to cry foul and complain about what was done. Instead, we choose to keep it moving, stay positive and produce outcomes, serve the kids and position them to change the system. Much like the Millennials are doing today with the political process. However, it is the unsolved problems that we have just discussed that are fueling one of the most difficult presidential elections in our entire history.

You can't turn the Titanic on a dime. However, you can continue to work with those who will work with you and have like minded opinions of the need to create an alternative path to the traditional path that serves the few at the top (1%) really well and does so on the backs of the majority at the bottom (99%) whom are not served well at all.

This is the root of all of the anger and distrust that's driving politics today. The racism and bigotry are easy scapegoats as answers to a complex problem that most cannot see, choose not to see or refuse to admit that they see. To fight those fights, you find yourself trying to make sense out of nonsense, which is not the type of critical thinking, problem solving and gracious professionalism that we try to teach our kids.

It is the Marquan's and Jerome's, who have come through the pathway, gained exposure to another pathway that cares less about numbers and more about tangible outcomes. A pathway that is severely under-funded, under resourced because we choose to not play the game for the benefit of self. Instead, we believe in the long-term, the Knowledge and Information based economy will mandate that the dollars are redirected to programs and organizations that are more about outcomes than numbers.

When the WDO sent Marquan and Jerome to us, we felt that it was up to us to ensure that they got access to the software training and certification and it was up to them to take advantage of the access we gave them. It was totally Jerome and Marquan who took the ball, ran with it. They even trained the WDO staff on how to use LearnKey. The trajectory of both of these young men's lives has changed. They are on an upward trajectory, they are giving back to the community, working with young adults and most importantly, they are writing their own journey with many of the options.

**COOK Report:** Then the other item on your agenda by working with Marcela and Michael is to get the 18 to 29-year-olds gainfully employed? Presumably this with Encounter Kansas City.

**Wells:** Actually, this is the third piece and the tail end of the pipeline. The first piece, or beginning of the pipeline, of course is our work in aSTEAM Village with the 1st - 12th graders in robotics, race car engineering and computer courses like game design and animation.

The third piece that you mention, to me is what is necessary to get 18 to 29-year-olds away from walking the streets with the ability to gain employment only in the service and fast food industries as opposed options where they have skills that qualifies them to be true participants in a Knowledge and Information based economies of today and tomorrow. It's also a space to acquire skills and thought processes that will enable them to be empowered to begin to fix some of the problems that have been neglected within the blighted community with on-the-job learning and mentor peering. This third way is that innovation and creativity will lead to innovative projects that will help the community.

The first part with the younger group is to accept that they will only learn so much inside the classroom with their K-12 education and that what they do learn inside the traditional classroom is not going to prepare them to be successful in college or enable them to get a decently paying jobs or a career beyond high school in the economies of today and tomorrow. They will need more! The reason for this is that most of our tenured teachers at all levels of school were prepared to work and educate their students in an economy that doesn't exist today.

As a result, there is a mandate to either retrain your teachers which cannot be done in one workshop or professional development session or you need an accelerator in an after-school setting, an alternative learning opportunity to get these kids involved in building their own future by providing supplemental learning opportunities in addition to the traditional classroom learning. That is what we are doing with our program for our K-12 grade kids. This alternative path is designed to enable them to tie what they are learning in the classrooms to something in the real world — period.

**COOK Report:** In other words, at this point you are trying to get a grant to get some money to enable you to begin teaching them the kind of auto CAD-based tutorials along with the systems thinking that Michael and Marsala have developed to such a fine art over the past 19 years in Los Angeles?

**Wells:** Yes. **The first** is our robotics program for the younger kids. **The second** will be the introduction of the auto cad tutorials and of similar architectural tools to enable the beginnings of e-7 kind of programs in Kansas City. **The third** will be more oriented to people in their 20s and will be focused on building an encounter-oriented program to local community development and service.

**COOK Report:** To give the reader knowledge of what is involved: here is the URL of a very excellent auto CAD Tutorial developed by Marcela. [This is a very important introduction to the concepts of systems thinking involved in the architecture program.](#)

**Wells:** Agreed and this is why it is so important for us to pursue having a progressive thinking, post-secondary institution like the University of Missouri - Kansas City acting as a "big brother" sponsor to our program because this would lead us to their school of architecture and urban design which would then give us the mentors needed to successfully

implement our Encounter outreach. So that we could partner up the young adults with the college students, professors and industry experts who could then collaborate on projects that solves problems within the community while the young adults gain skill-sets that will lead them to employment possibilities.

So when you get one university, your community colleges also will have to come through and when this happens you begin to get the soldiers you need to build the necessary outreach into the communities in which these kids live. And you can now say: "let's start formulating some plans and working on some projects in the community."

**COOK Report:** Kauffman's Million Cups of Coffee comes to mind. But it's much more focused on specific people neighborhood and problems – correct?

**Wells:** Yes, however, I can see some of our students and young adults being invited to present their ideas at the One Million Cups. I think One Million Cups is excellent, we just need to get more diversity in the room as producers and presenters. The Encounter is the talking, sharing and idea generation and the Innovation Lab is the doing. It is something where it becomes possible - for the first time - to connect the "making" to the "learning" in order to produce specific positive outcomes within our communities. And this is what I mean by "Encounter Kansas City Urban Innovation Labs." See below page 59.

**COOK Report:** So give me an example or two.

**Wells:** Let's say one of my students lives in a house in a challenging neighborhood that is next to a vacant house with a lot between the two. On that vacant lot was once a house that has been torn down and demolished. The student then asks the question, what kind of space can he turn that lot into that will serve his community?

**COOK Report:** Some kind of urban garden or a variation of an urban park?

**Wells:** Yes.

**COOK Report:** Meeting Michael Rendler and Marsala Oliva was obviously a major turning point for you. How did you meet them? When and under what circumstances?

**Wells:** I was introduced to Michael Rendler by Brig. General (ret) Arnold Gordon-Bray. During a meeting between General Bray, Chester Thompson and I in September 2015 General Bray told us about this brilliant guy in Los Angeles that he was working with on some Smart City projects throughout the U.S. and he suggested that Michael and I should meet.

Well we did meet. Ironically, our first 15 to 30 salvos were via text and it was quite evident that we hit it off and connected based on some synergistic ideas that we shared. My introduction to Marcela Oliva obviously came via Michael Rendler since they are part-

ners in all of the projects that they do. Marcela, introduced me to the concept of the Encounter and gave her blessings to allow us to start an "Encounter Kansas City."

**COOK Report:** Ever since we began to talk in December 2014 almost two years ago William had made it very clear that — aside from a small amount of money to support his basic activities — what he had an absolutely critical need for was a neutral space for the kids to meet and carry out their projects. By early 2015 Chester Thompson, President of the Black Economic Union had given William approximately 1000 ft.<sup>2</sup> in the Black Economic Union building in the jazz district.

But William you have had another breakthrough in the last two months I believe.

**Wells:** I have been using, among other things, real estate contacts to find locations that might be feasible and available and affordable. Becky Baker is a realtor who works with Bill Schulz and has been working with me as well.

Our search led us to an introduction to Mr. Abnos as Beckie Baker pursued finding us a larger space because we have outgrown our current location. We went to his property to see his space and when the discussion came up about renovation of the facade, I immediately realized that there was a project that could become the focal point for the launch of Encounter Kansas City Urban Innovation Lab. I knew that we could have a very high profile project with under-served, at-risk kids participating. Mr. Abnos struck me as a visionary who would sign on to a project that would not only help him but also serve the community in a good way.

Here is [how he describes himself](#): "We provide commercial office and retail space to new and existing businesses in the Midtown, Plaza, Brookside, and Waldo neighborhoods of Kansas City. Since 1979 we have been actively involved in the development and revitalization of inner-city entrepreneurs and small businesses. We are proud to provide low-cost office and retail space to new and growing purpose. . . . We place great importance on the success of up and coming entrepreneurs. . . . Our programs have helped dozens of micro businesses succeed and grow into enterprise corporations. . . ."

**COOK Report:** William has been moving with breakneck speed. Within one week of his discovery of 6301 Rockville Rd. he had scheduled a telecon with Michael, Marsala and the Kansas City base contingent to discuss next steps.

**Wells:** That discussion happened on Tuesday afternoon October 11 and all parties decided to convene on November 10 a workshop at 6301 Rock Hill where Mr. Abnos agreed to host and provide lunch. (William continues on page 34 below.)

**QUALITY POINTS**

- Four 100' x 154' efficient floorplates
- High capacity AT&T and Google fiber
- Building shell easily adapted to modern technology and efficient utilization
- 220-car parking (part covered) with ability to expand

**LOCATION POINTS**

- Strategic location close education, research and amenities
- Easy access to public transportation infrastructure
- Easy access to interstate loop highways
- Convenient location to motivated work force

PROPOSED EAST ELEVATION



**PGAV**ARCHITECTS

APM Abnos

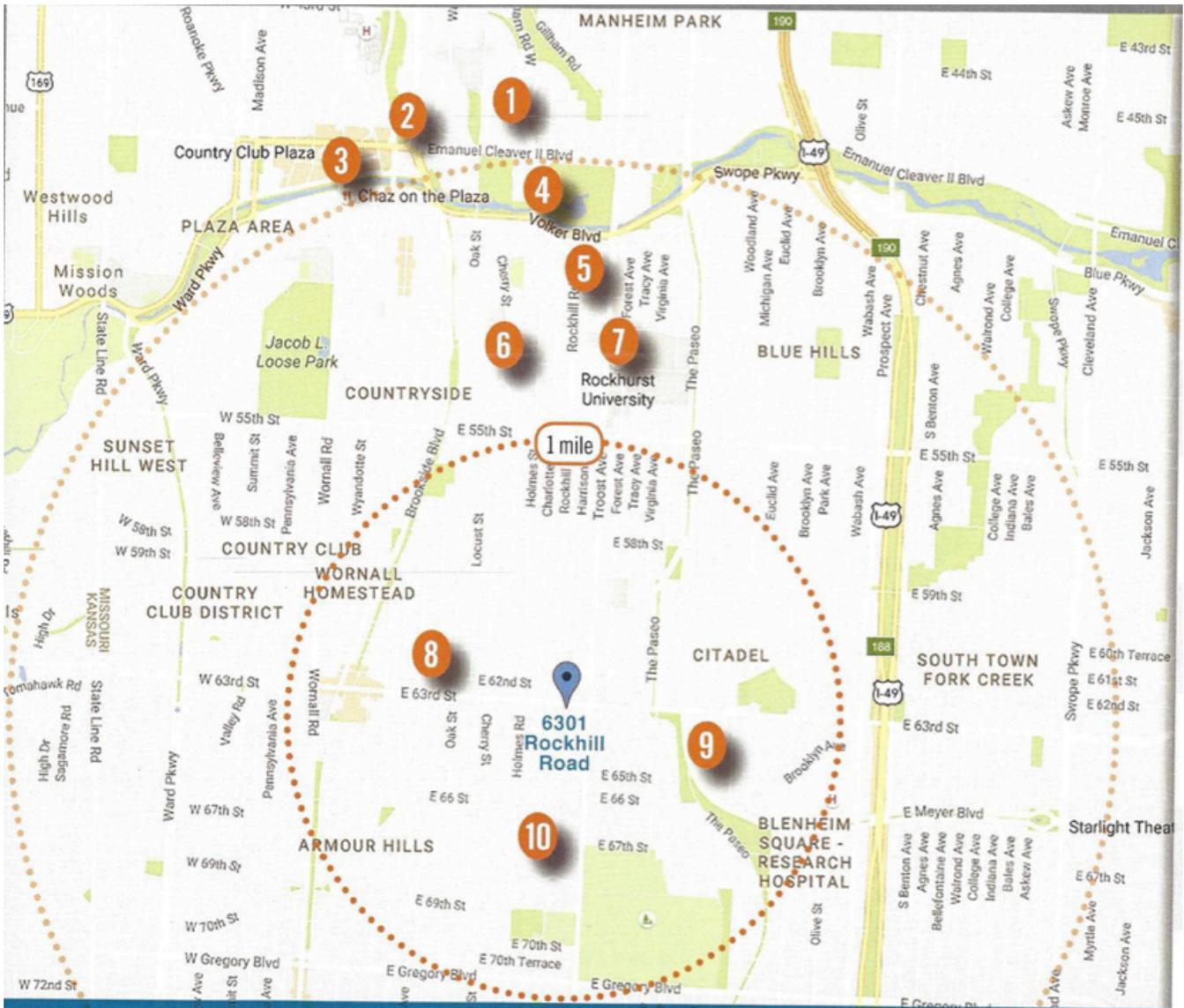


**MOVING FORWARD.**

6301 ROCKHILL ROAD KANSAS CITY, MO

PROPOSED NORTHWEST ELEVATION





The objective for November 10 will be to create a working document outlining a series of deliverables. ***The goal will be to put a local team together using the LACCD design tools so that before the Christmas holidays begin under William’s leadership, a locally recruited team of students can use the Los Angeles-based tools to design the new workspace for aSTEAM Village’s new and very copious headquarters of over 7000 ft.².*** Mr. Abnos has been asked to consider donating one of the four floors of the 6301 Rock Hill Road building to the aSTEAM Village kids during the design phase and until construction begins. Upon completion of the construction, aSTEAM Village will become one of the paying anchor tenants in the new Innovation Center

**COOK Report:** So what are the specific next steps that need to be taken with the University?

**Wells:** 1. Obtain buy-in from the City of Kansas City, MO, Abnos Property Management, Google Fiber and Google Fiber, local post-secondary institutions and local industry to provide needed seed funding and/or human resources to launch the Innovation Center at to provide seed funding to launch the Innovation Center at 6301 Rockhill Plaza with the 75 students who are currently in aSTEAM Village by November 30.

2. Obtain buy-in from Central Academy of Excellence and Benjamin Banneker Charter Academy to dedicate 10 computers and space for same at each location with approval to attach these computers to a separate network connection that will enable the 20 computers to connect virtually to 15 aSTEAM Village computers and the e7 Architecture network by December 30.

3. Continue to enable the students learn the necessary software and obtain the basic certifications that will make it possible for them to participate in the Rockhill Plaza renovation so that we can move this program from concept to reality. From January 5th through October 30, 2017.

4. Have two to three projects in the pipeline for the first set of students to participate in while simultaneously bringing in the second set of 10 to 15 students to learn the necessary software and obtain the basic certifications that will enable them to participate on the third project that was in the pipeline. June 1 through September 1.

Hopefully and logically, after success by thirty students on two projects, we will have won over industry, the government and the education system to consider teaching and preparing more students for real world projects and thus begin to fill the pipeline of workforce talent needed to implement, protect and sustain a City that is booming with economic development and soaring with inclusion, diversity and prosperity.

This YouTube URL 6:00 minutes long <https://youtu.be/dqTToj-Tija8> highlights a superb presentation showing why William's "alternative path" is so needed.

**aSTEAM Village**  
@asteamvillage

aSTEAM Village is a grassroots community initiative to engage students, parents and educators in STEM/STeAM programs. Supported by NSBE Jr PCI and BDPA.

Kansas City  
[asteamvillage.org](http://asteamvillage.org)  
Joined April 2014

461 Photos and videos

**Tweets** Tweets & replies Media

Pinned Tweet  
aSTEAM Village @asteamvillage · Oct 10  
A weekend in STEaM education @asteamvillage Robot and Lego Build, Book Signing, game design using CAD @R5NSBE Jr. kids got their learn on!

New to Twitter?  
Sign up now to get your own personalized timeline!  
Sign up

## Chapter Four

# Some Very Personal Points of View

**Editor's Note:** Based upon exchanges about life in Kansas City that I began to write and publish in 2012 I finally asked William on October 10, 2016 to respond to some heart-felt but blunt questions. With William's permission, I publish these recent exchanges in the hope that they will help readers to see below the "polite surface" of the so-called normal editorial exchange. William has indicated that he is determined to provide an alternative pathway — one that puts the well-being and development of the adolescents and young adults in William's community first. I have developed a fairly decent knowledge of what has shaped postwar Kansas City but that knowledge cannot even begin to include what someone like William has who's lived there all his life. So I offer this exchange to readers with the hope that it will help them see. feel and communicate beneath "the surface".

**COOK Report:** "Kauffman Foundation" - when these words are said in Kansas City in the community in which you are building your leadership role - what do they mean? Do

they refer to the economic story of a white man who made good in the local "free market"?

**Wells:** Ewing and Marion Kauffman did a lot for Kansas City and they were amazing philanthropists. Mr. Kauffman started the Royals Baseball Academy and added a financial literacy component to the Academy because he wanted his players to understand money as well as be ball players. It is without question that the Kauffman Foundation is the most powerful, influential organization in Kansas City for education, politics and entrepreneurship. The problem is when the founders passed away, the organization itself has organically gone in directions that may have strayed from the K's intended mission and inclusion of the foundation they created. This can be linked to the leadership or the people who have been in positions of influence NOT to the organization as a whole. For instance, I think that what you say about the Kauffman Foundation in your previous article "MIT vs. Kauffman" is more about the ideology of the author than the ideology of the organization as a whole. [March April 2015; *COOK Report*; pp 63 -78.]

**COOK Report:** What does that story say about the ability of young Blacks to be awarded Kauffman Foundation fellowships and how they must act to be judged worthy of their award and continue to get the stipend attached to the award? And what about the tradition and standards of Jesse Nichols? Is it not really sickening given who Nichols was that the real estate developers have a meeting and prizes named after Nichols? I am thinking of Whitney Terrill's 2005 novel *King of Kings County*. I had no prior idea. But what about the real estate developers in Kansas City? Are they people to whom the young kids you are working with should look up to? However, given what we just heard from Damon Abnos, the answer would certainly appear to be a resounding "yes."

**Wells:** I cannot speak to the history of J.C. Nichols or the longitudinal success of the Kauffman Scholars fellowship. I can speak about one of our former students who as an 8th grader was chosen to be a Kauffman Scholar. This means that if he graduates from high school, the Kauffman Foundation would pay his entire college tuition to the college of his choice. He wanted to go to MIT! Problem is that as an 8th grader, his reading and math skills were below grade level. So, as he got older and moved towards high school graduation, he was on a path that would not have him enter the college of his choice and enter this school ready to succeed. Consequently the amount of money to be spent on his college education would be minimal and more likely than not, be a one semester expense at a local community college as opposed to a four-year expense at MIT. Maybe expense is not the word I should use, instead I will say investment because that is really what a program like Kauffman Scholars should be viewed as...an investment.

**COOK Report:** I have no doubt whatever that Jerome and Marquan greatly respect you. And that they should respect you. But how does that respect flower and grow as you are currently working with "HUD"? What kind of stress does it deliver as its message? That one more time in Kansas City "urban renewal" becomes "Negro removal?" These are the kinds of stories I heard in person during my eight-day visit to Kansas City in June 2014. I am saddened but, all things considered, not surprised that some of the people involved hate one of their would-be leaders because of an interracial marriage.

**Wells:** Gordon, there are two types of people in this world and one common denominator that will be a part of the lives of all people. Every person who walks this earth will have problems but some people who only point out the problem, complain about the problem, lay blame and responsibility for the problem and then complain about the problem some more but never take action to solve the problem nor will they take the time to understand the problem so that they can solve the problem. These people are forever going to be "consumers." On the other hand, there are people who will identify the problem, take the time to understand the problem and then focus their energy, time and wisdom on solving the problem. These people are your producers! These people are your critical thinkers, these people are your innovators, these people are the ones who move our society forward.

This is the core of the curriculum and discussions we have with our kids, repeatedly and consistently. I am not worried about respect or being respected because the truth of the matter is being a man of color, the majority of people, regardless of their ethnicity, is not going to respect me. Heck, today's society is at a point where people in general don't respect each other and I attribute this to technology and the lost of art of taking time to get to know each other and placing a premium on respecting each other. At the end of the day, if you have the respect of your parents, grandparents and children then you will be able to respect yourself. If you can respect yourself then organically you will respect others. That is all the respect any of us should concern ourselves with because that is all that really matters when we draw our final breath. Did you respect yourself and earn the respect of your immediate family?

**COOK Report:** Now, as best I can understand what you're telling me, you are putting together a leadership role for yourself in the black community - and damn nothing wrong with that. But what does this role demand? How much hypocrisy does it demand?

**Wells:** No, not at all! I am not putting together a leadership role for myself in the black community. That is a death sentence! If you try to lead and be leadership in the black community and you cannot afford or are afforded Secret Service protection like President Obama, you will not survive because you will have a target on your back that

will have everyone shooting at you to bring you down, silence your voice, impede your progress, diminish your following and/or discredit you. NO THANK YOU! I am good not being recognized as a leader, I do not want to be a leader, I only want to pass my knowledge on to the younger generation and even younger adults who just want to try to come together to make the world a better place. I read the Book of Proverbs and the African Proverbs regularly and I am firm believer that the less you speak, the more you accomplish. The more you speak, the less you accomplish! As I said before, I just want to do things, positive things!

**COOK Report:** I'm not saying that there is no place for any anger. Man I can't help but wonder — what the lesson is here for the kids? They come directly out of a world famous musical culture. World-famous. And uniquely American. And uniquely black. No? Of course what did this get those whom try to remain true to it? What it got between the end of World War I and Brown versus the Board of Education in 1954 was European exile. Many escaped to live out the remainder of their lives in Europe. Should they have had to do this? No they should not. But what about Charlie Parker? Here I could be wrong - in other words my memory could be faulty. But did he not finally die immersed in alcohol?

**Wells:** Gordon, we are in the middle of the third emancipation, the first emancipation was physical, slavery was outlawed, the second was civil, rights were granted that we denied based on race, gender and choice of who to love. This third emancipation is one of thought, it is the emancipation of the mind and this emancipation of the mind is fueled by the economy of today, the Knowledge and Information based economy. This **third emancipation** is also being fueled by what the *COOK Report* has followed for all of these years, the Internet. The focus is on Digital Inclusion, the buzz word is Digital Divide. Truth of the matter is that **the economy of today and tomorrow in combination with the Internet is enabling people to realize just how mis-educated and under-educated they really are as adults.** They are understanding with newfound clarity that the 'A' they earned in school was awarded for knowing less than 50% of the story and the 'F' they earned in school for only knowing 50% of the schoolwork actually should have been an 'A' because they were only being given 50% of the content on any given subject.

I say all of that to say this, knowing that Jazz and African-Americans are a key piece and significant contributors to the history of Kansas City and the states of Missouri (Civil War) and Kansas (Education), and if we want to generate Kansas City pride then **why isn't it a mandatory for all schools in the KC metro area, public, private and charter, to take their students to the Jazz and Negro Baseball Museum just as the travel to the respective State Capitols is a requirement of all school's curriculum.** If you show the key and significant contributions, then not only can one feel

good about themselves and their culture, but also others can understand and respect the other cultures that make up their dynamic communities.

On another hand, you cannot expect or blame the schools for not giving the history and whole story when, instead as a collective, our families and churches can fill the gaps that we see are not being filled by our education system. ***Ultimately, it is inherent and the responsibility of each individual to increase his or her learning and wisdom.*** It is the responsibility of the education system to teach us to read, write, communicate and think. It is also the responsibility of us as parents to make sure that our children can read, write, communicate and think. The educational system was not designed to teach us to think - so much as to follow the orders of the foreman at the local factory. It is just getting to a point where the education system finally realizes and is being asked to teach our children to think because of the demands of the Knowledge and Information based economies.

***COOK Report:*** Now you have an antidote... Do you not? And the antidote is technology. It is game for money and employment there. And, **as a result there is something else other than a future as a Michael Jordan** which will be beyond 99.99% of them.

***Wells:*** The meaning of technology is so often misunderstood as far as I am concerned. I tell our kids all of the time that actually the technology is the human mind. It is their mind and thus we need to allow them to dream, create and explore. The ability to do this is what should be seen as science. What most people pass off as technology, the Internet, computers, SmartPhones, etc. are nothing more than tools. The role of technology should be to illuminate the human mind. All innovation comes from thinking and the tools are the resources available to enable one to implement his or her thoughts. A person's work ethic discipline, and commitment to their thoughts determines whether they will succeed, fail, or never even try to create.

***COOK Report:*** So what is William Wells doing? Is he not in the most clever of ways putting together a group of black led entities who, in carrying out the duties that they have publicly said their mission is to carry out, will come in to the area where you are setting up shop and will carry out their duties by working with you in your a STEAM Village program. **This is your alternative pathway.** And given what is in place as well as what is expected of adolescent and young adult black men and women, is it not pretty smart? YEAH I think it's brilliant and perhaps, if you can also set examples for them and show them what they have to do to survive, then you will have achieved something that perhaps no one else in Kansas City has ever achieved.

**Wells:** I don't know how brilliant it is and what I am doing is not really rocket science. I am just doing what I have seen my mother do on a daily basis for 70+ years and what I saw my father do for 70+ years before he succumbed to Leukemia. My mother is selfless and my father was straightforward. I am trying to just be selfless and straightforward. I am trying to, teach the kids to be selfless and straightforward. I am trying to teach them to be kind and confident in who they are, where they can go and who they can become. Believe in self, love your community, help others and produce something, do something that will make the world a better place.

**COOK Report:** Because there are organizations who are not led by Marion Kaufman or Jesse Nichols who, as they do their assigned duty, can do it in such a way as to be a positive example to those whom you wish to help in building a leadership cadre. I think that's what's going on and that is what I'm trying to understand.

**Wells:** Collaboration! Selflessness! Comprehensive Strategy! Shared Resources! It is simple to identify what the problem is that sustains the Troost Wall. It is simple to see who truly wants to see that wall come down and, in the process, see a truly inclusive, harmonious Kansas City where everyone shares in the prosperity and growth of the city. It is also simple to see who wants that "wall" sustained because they do not want to have to compete and collaborate with shared and equitable outcomes. It is easy to see and identify those who are out for self-gain and boosting egos rather than acting to make the world a better place.

**COOK Report:** William I'm not trying to be an SOB. I am just an historian with a strong interest in psychology and culture and music and what it means to be black.

**Wells:** Well, I am not trying to be Moses, (laughing out loud here)! I am only trying to share a gift that I believe I was given to share with others.

**COOK Report:** Aren't questions I've just raised also the ones raised by Marcela and her use of architecture as a tool of cultural foundation? Isn't this that which makes her cultural approach so unusual and one would hope so effective?

**Wells:** Absolutely! All hands on deck to cause change and make this city and country grow, evolve and increase on its greatness. Everyone has a place, some people who complain and march are needed to bring light to problems and give those problems a voice. Some people have to be in the laboratory doing research and testing to come up with a solution to the problems. Some people have to sell the solutions and get the solutions to market so that the consumers are able to buy the produced solutions. I like to think that aSTEAM Village, the kids and families of aSTEAM Village are the ones in the

laboratory that are doing the research, testing and producing the solutions. We are not the talkers or marchers, we are the doers and to be clear, without the talkers and marchers we would not be afforded the opportunity to do the exploratory learning, re-search, testing, and production.

## Jerome Middlebrooks

**Editor:** At William's request I interviewed on September 4 two of the youths with whom he has worked.

**COOK Report:** How did you come to meet William and what had been your experience in workforce development in the technology arena?

**Jerome:** When I met Mr. Wells I was in between jobs and had gone to a career fair. During that career fair they asked me would I be interested in working in IT and I said of course and the very next day they linked me up with Mr. Wells. This was through the FEC career fair at Union Station in Kansas City. Mr. Wells was a pretty straightforward guy and you could tell that he cared about people in the community.

I and another intern talked both about our situations in the community and what we were dealing with. What our goals are and how IT or something along that line could benefit our lives and give us different opportunities.

**COOK Report:** A quick question -- was the other intern Marquan Wilson by any chance?

**Jerome:** Yes. Really they started by telling us to meet this person who had been categorized as also interested in IT. I had really just met the Full Employment Council people at that career fair. They had a booth at the table there when I met them. I gave them my resume and they said okay I would receive a call to come to the FEC building.

**COOK Report:** After your initial meeting with William what happened next?

**Jerome:** He set us up with [LearnKey](#) which was a very interesting piece of software. There were a lot of things there that you could work with. They material ranged all the way from Adobe Photoshop to database management software and to material on security.

**COOK Report:** Tell me please what happened to you over the next couple of weeks or months?

**Jerome:** Well every day we would do some LearnKey stuff. We used the PowerPoint module and then Word and went on to cyber security.

**COOK Report:** Would you tell me a bit more about how it works?

**Jerome** Okay. It is web based training or "WBT." How it worked worked. You would watch a video and then you would go through the module accompanying that video and then you would take a test and you would get back material saying either that you knew it or did not. If you score at least 80% on the test, you can move onto the next module. You would take a final test and then you would get the certification.

**COOK Report:** How long did you work with LearnKey?

**Jerome** It would depend on how you set up your usage. Some modules were shorter than others. Some were meant to be shorter. Apart from exposure to software there was information on different personality types and how to deal with different people in the workplace. During the time that I was a summer intern with Mr. Wells, I probably got seven or eight certifications done.

**COOK Report:** When you had that accomplished, what happened next?

**Jerome:** He introduced us to a lot of people who were involved in the professional use of the kind of information available in LearnKey. We went to architectural firms and two different businesses where we would sit in meetings and see how business was conducted. We actually got to lead a meeting and he just really opened our eyes to the different kinds of opportunities out there.

We went to HNTB which is one of the largest architectural firms in Kansas City. Although, if you asked nine out of 10 people, I guarantee that those nine would not even know that this company was out there.

He brought us there with his two interns and we got to tour the whole building and during the day we got to go through all the database management software we got to see the media design part of it, the business side, and finally the architectural side.

And that just let us know that, just in this one company, there was so much that we could do with technology with architecture and with database management. There was

just so much there that we never knew about. And the lesson that followed was that, in order to know what's out there, you have to be exposed to it.

That's part of the issue with the kids. They are not exposed to many possibilities so they cannot possibly think about the possibilities they don't even know about. The experience with HNTB involved myself, Marquan Wilson, and another past intern of Mr. Wells, as well as a group from aSTEAM Village, and a few high schoolers from a local high school.

This was just one case. There were others. We got to sit in on meetings of city government. We talked about different avenues available to people to get Internet access. In meetings related to the digital divide we saw how difficult it was to get good Internet access and how - without it - you would fall behind.

**COOK Report:** So he already had a bunch of contacts made and it was like let's take a trip to HNTB be and see what they do.

**Jerome:** Yes right.

You said something about how interested you were in issues relating to the digital divide on Troost Avenue. We sat in on one meeting that was related to this.

**COOK Report:** I had been watching digital divide issues in Kansas City and quite frankly I don't see where any leadership is coming from. They think the Google fiber is somehow magically going to change everyone's future but I disagree with this because I don't think that the digital "establishment" knows what they're doing.

**Jerome:** I can't really speak on that very well because I don't know enough about it to speak knowledgeably.

**COOK Report:** No problem. I have been involved in a kind of an advocacy role and as a result I think that often times NGOs are functioning more for the sake of the survival of the NGO than for the people are supposed to help. And if this is a political area that you're not comfortable with we really don't need to go in that direction.

**Jerome:** Yes I really don't know this area at all well and would be much better speaking only about myself.

**COOK Report:** Did you get hired at HNTB?

**Jerome:** No. I worked for a while with Mr. Wells at Benjamin Banneker but now I work for Cerner.

**COOK Report:** They are medical software right?

**Jerome:** Yes. But let's rewind a bit so I can tell you something of what I've done with Mr. Wells.

His goal at aSTEAM Village is to connect kids with a different style of learning that would be better suited to those who want to be involved with STEM. We became involved with BDPA which is formerly known as Black Data Processors Association and NSBE (National Society of Black Engineers).

We would volunteer with the kids on the weekends as they prepared for their robotics tournament. Then we actually went to Boston with them.

**COOK Report:** I bet Boston was an eye-opener.

**Jerome:** Indeed. It was amazing to see that many young kids with so many professionals and to see that they're not only talking about it but doing it. We could see companies like Google with employees that actually looked like us pretty much. They get to see other people their age compete. We did make it to the nationals and I'm very proud of them because I saw the effort they put in before the actual competition. Them just being involved with something like this is amazing because, first of all, not many kids get to do something like this.

They got to use their brain; they got to have fun; and they got to see what the future can hold for them.

**COOK Report:** How was the connection with Cerner made?

**Jerome:** Cerner was just one of the companies that Mr. Wells introduced us to. Those introductions caused me to look more carefully at career paths at Cerner. However, I actually got this job through a third party. I always do my own research so I went out and job hunted after Mr. Wells had given me the necessary tools. And, if I told him I was looking for a certain kind of job, he would do his best to help me get in place with the right contacts.

**COOK Report:** In other words, it is just a lot of solid networking?

**Jerome:** Yes. Mr. Wells has built up good solid rapport with a lot of people.

I'm a consultant with Cerner now and I just came back from Maryland where they were introducing the nurses and medical assistance to the software for the first time.

I had to go there and make sure that if they had questions on things like workflow that they wanted the answers to that I could get them for them either that or knew them directly. And if there were problems which there were I would either have to figure out how to fix them or would call the command center and they would walk us through the steps necessary to accomplish that goal.

I was in Maryland for two weeks on their behalf and I do like the different places that you're able to go. If you have any additional questions and want to email me I'll be glad to type up the answers for you.

**COOK Report:** OK. Many thanks.

## Marquan Wilson

**Marquan:** Mr. Wells showed us LearnKey and that was really helpful. However the problem is that the Full Employment Council has started to take a lot of the credit for things that he did himself as he worked with us. I am working with Banneker part-time now and the FEC has tried to take credit for me working for the school. I can say literally that Mr. Wells drove me to that school where I was introduced and which led me to have the opportunity of working there. However I've also seen the way in which Mr Wells was not given the attention and the proper credit that should have been reserved for those things.

I did a summer internship with HNTB, the architecture firm, that lasted about eight weeks. I worked with the LearnKey software including doing certifications that make us more hireable I got to work with Excel and with PowerPoint. These are some of the basic business tools that one will have to know how to use in order to work in corporate America. I also put together a document on how to move files safely from one computer to another.

Lots of things that I had to do for my internship with HNTB I already knew how to do from my experience with LearnKey in working for Mr Wells in October of last year. At the junior college i was studying journalism. But as far as Learn key goes I was always eager to jump right into the IT related certifications it offered. It was obvious that it was something that could broaden my experience.

Right now I'm looking at being able to continue teaching because I'm working doing that at Banneker. They have offered me a role as a K through second grade science teacher. I will be doing that this year while i continue my schooling. I am looking at possible opportunities in coding because from what I've seen there are shortages of people who can do that well.

Working with Mr. Wells has opened my eyes to the fact that there are many many jobs available in Kansas City that, with access to the technical training he made available, I am able to do. Until he started to help us out, I had no clue that these opportunities existed. As far as robotics was concerned it was part volunteer and part internship. I was getting paid from the full employment counsel from 9-to-5. As far as robotics was concerned that was from 6 to 8 and volunteer but it was still work nevertheless.

One of my concerns has been that FEC has started take a lot of credit for many of the things that William did himself. They wanted to take credit for Jerome working for Cerner which, as he told you, was an opportunity he found on his own. And they wanted to take credit for my working at Benjamin Banneker when I can honestly say that it was Mr. Wells who asked me to hop in his car and drove me there. Seeing the way in which he was not given the proper attention that he deserved for what he has done has not been so good. Now this year I am going to be working with his robotics team and coaching the Junior FLL and I'm really looking forward to that.

I did a summer internship with HN TB before being hired by Banneker School and I got to see the enormous variety of possibilities and working with the kinds of software they need including a project where we learned how to consolidate a database of several hundred thousand files and in this general area I got to make a one page file advising some of their technical people how to safely undertake this file consolidation. This was in support of their IT technical support

As I look around and see more clearly the opportunities that are out there I certainly want to learn everything I can about computer security but I'm also getting very interested in teaching and teaching science. I think this will always be a need. **UPDATE:** Marquan Wilson is now a full-time 2nd Grade Science Teacher, NSBE Chapter Advisor and Robotics Coach.

## From Wikipedia: **Los Angeles Neighborhood Councils**

*There are currently 96 neighborhood councils within the city limits, throughout a spread out, diverse, and huge metropolitan area in the [City of Los Angeles](#) in [Southern California](#). The councils are the result of political and voter action for a vision of a citywide system of independent and influential advisory neighborhood councils and the creation of a city department to guide that process, was the centerpiece of a new Los Angeles City Charter that was approved by the voters in June 1999 in the City of Los Angeles, California.*

*The standard for membership is often more liberal than the location-specific approach used by most political subdivisions ("you vote where your house is" standard). Participation is based on "stakeholder status"—a broader definition—a businessperson or someone representing a local church, or hospital, or charity would qualify—on that basis—even if they do not live in the exact area. Several positions on neighborhood councils may be set off—specifically—to guarantee that those local business people, church, and charity participants are included. This resident—local businessperson alliance hopefully encourages acceptable, practical, economic development for an area.*

### *Meetings*

*To effect their interests, neighborhood councils organize a monthly "town meeting", not unlike the historic model demonstrated in New England towns. An agenda is posted on issues under discussion, relevant community reps or City of LA or LAPD officials may be invited, discussion is opened to members of the council and the public attending, and then the council votes to take its position. Basic parliamentary rules are followed, and the California standard for open public meetings, the Brown Act, guarantee designated "public comment" periods.*

*Organizational structure Administration The neighborhood councils have been allocated \$37,000 each per year for administration, outreach and approved neighborhood projects.*

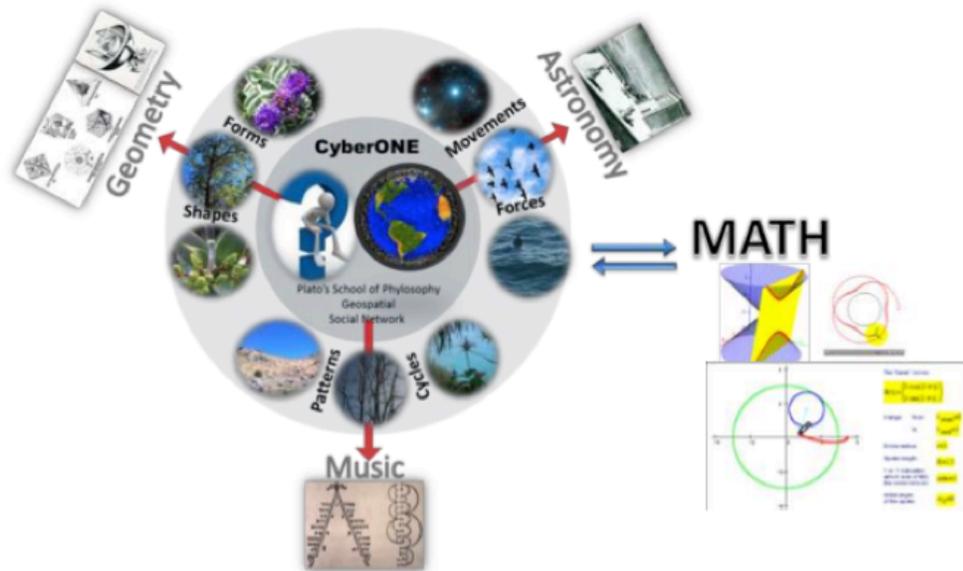
*Vision —The vision of a citywide system of independent and influential neighborhood councils, and the creation of a city department to guide that process, was the centerpiece of the new City Charter that was approved by the voters in June 1999.*

*Mission statement To promote public participation in government and make government more responsive to local needs by creating, nurturing, and supporting a citywide system of grass-roots, independent, and participatory neighborhood councils.*

### *The Plan for a Citywide System of Neighborhood Councils (Plan)*

*Starting with a skeleton staff in 1999, the Department of Neighborhood Empowerment held 16 public workshops throughout the city to begin teaching people about grass-roots participatory democracy, and to hear the public's needs, dreams, and suggestions. By the time the Plan for a Citywide System of Neighborhood Councils (Plan) was adopted, nearly 50 more public hearings had been held.*

Math, geometry, astronomy, and music were disciplines studied by Plato; he called them the Quadrivium from the Pythagorean School and mentioned them repeatedly in his book *The Republic*. Together, they awaken the mind to a universal order, freeing the mind from its bondage of mere "shadows on the cave wall," as Plato would say. By studying the links and intersections among these disciplines, one learns to recognize relationships and patterns in nature. Disciplines are tools to help us understand natural systems. We invented music to understand cycles and patterns, geometry to see shapes and forms from nature, astronomy to measure forces and movements, and mathematics to imitate and integrate it all into all human endeavors. Disciplines are, in essence, tools to help us be part of the Earth and follow its beauty. But even with 13,000 satellites, we are not part of it. We became so specialized that we forgot what we were studying. The etymology for these words facilitates the essence and understanding of these words; math is to know, to care, and to learn it all. This integrative approach has demonstrated great success at the LATTIC Architecture Program.



## Disciplines are tools

The above slide from Marcela’s cyber one deck is an important description of her basic foundational educational philosophy. What follows on the next page below are some screenshots from the E7 website. Readers should look at them as an entry way and guide to what they contain.

## LA Neighborhood Councils

Not surprisingly Marsala works with these councils in her Los Angeles Encounter projects. We include the listing to bring it to the attention of Kansas City readers. As the outreach there gets underway, it might just be possible that people wish to borrow some characteristics of them for Kansas City.

## Chapter Five

# Who is Marcela Oliva?

### ***Marcela as a role model in Education and an advocate of the importance of alternative paths***

As we "grow up" we all need role models. We talk about education -- the meaning of this word coming from the Latin to "lead out." All of us can remember our great "teachers". Unfortunately in far too many environments especially those of the urban inner-city, we have "teachers" who only go through the mechanics of what some Board of Education "requires" of them.

Consider our "reality." Well over a century ago public education in the United States was developed in order to train obedient factory workers to perform on assembly lines. They needed to read and to write and to be able to follow instructions. Thinking for themselves was absolutely not a requirement. Requirements then were politically influenced and remain so now but the sources of information available to the children to the students and exploded and often bear little or no relationship to local required curricula. The more basic intelligence they have the more quickly they will see what appears to be a lack of any connection to their reality. Their respect for the system in which they find themselves quickly disappears.

What William is doing in Kansas City is designed as an alternative path to the requirements of this restrictive system. We are fortunate that it is still possible for people to explore their inner "passions" in order to find a meaningful place in the world in which they



find themselves. "Kids" have grown up now with the availability of one kind of personal computer or another almost as ubiquitous as their very clothing. As the power of these machines have grown, in the last decade especially, the ability of their users to shape their own digital environments has become virtually limitless.

Meanwhile, Marcela Oliva came to Los Angeles from her native Mexico in the late 1980s. The profession of architecture -- expressed as one's ability to shape the environment in which one lives -- became the source of her inspiration and passion. The increasing ubiquity of computer tools made it possible for her to explore the development of computer-assisted drawing followed rapidly by the availability of the new tools to locate in geophysical space the objects that we began to use other digital tools to create.

Here is how she explains the origins of her inspiration. For over the past 20 years in the system of community colleges in Los Angeles she has created the largest program in the computer-based design of architecture buildings and green "systems" matched to environmental needs in the nation. In doing so she is creating or perhaps more accurate to say has created what is currently the most innovative philosophy and system of education available outside of the elite environments of places like Stanford and MIT.

Here is how she describes herself: <http://www.ladytime.org/blog/marcela-oliva-architect>

The moment I realized how many people in Los Angeles have no access to design and architecture, was a crucial turning point in my life that made me change directions. I saw the untapped talent in our community and the deteriorated environments they live in and it broke my heart. How could this happen? Architecture elevates the human experience and provides a better quality of life; it makes people feel better about themselves, facilitates the body to stay healthy and helps communication. I am surprised to see how many people do not know about the power of space/place and how everything around us affects who we are

## Who I Am

My name is Marcela Oliva and I am an Architecture Professor with over 25 years of experience with a Bachelor and a Master Degree of Architecture, Environmental Design and Building Science. At 16 years old, I got a full scholarship from the American Embassy in Mexico City, and, although I did not accept it, I saw the world in a new way. I immigrated to America at the age of 21 and I graduated at the top of my class from USC School of Architecture and Columbia University in the City of New York. I was privileged to be a NASA Architecture Fellow and I developed the Cyber-Infrastructure Project for National Intelligence. For 10 years, I designed and implemented the Virtualization and Simulation sustainable and resilient standards for the largest educational green project in the Nation at the Los Angeles Community College District in partnership with AECOM and URS.

Did you know that for 3,000 years, people had to pray before studying geometry? It is through space-time inside the geometry that we connect to the fabric of consciousness. Geometry organizes everything around us, geometry is what designers create subconsciously or consciously to bring order out of chaos. That is why everybody likes brand clothes, elegant objects, expensive cars, unique furniture and buildings shown in movies, because they are all of high design. Though, design does not need to be expensive or only for the few or detached from the spirit. We can all be designers and participate, because we are all co-creators, empathic beings designed to succeed with solutions that are abundant for all.

That is why the true magic of my growth mostly happens in my classroom/studio, also called UrbanLab, where we design and build peace projects. LATTC Architecture and Environmental Design program has allowed me to develop a project-based curriculum, where the project is an urban intervention in the community. Projects such as urban farming, façade retrofit, solar walls, green housing, homeless shelters, outdoor furniture, art trellis to grow food, water collectors, pocket parks, outdoor galleries, murals, drinking fountains,



etc. Our curriculum is designed to shift our students' minds, as it is based on competency, virtualization/simulation, open educational resources, universal principles, holistic understanding, all through the meaning and purpose of life.

You can contact Marcela Oliva at: [marcelaolivaprofessor@gmail.com](mailto:marcelaolivaprofessor@gmail.com)

You can know more about the program and the mission at: <https://sites.google.com/site/lattcarchitecturetechnology/>

You can know more about Marcela Oliva at: <https://www.linkedin.com/pub/marcela-oliva/6/66/36>

**3 Minute Video** <https://www.youtube.com/watch?v=Rbh4r1scbVc>

**Urban River-Labs Entry** The Mayor's Office of Budget and Innovation and the Lloyd Greif Center for Entrepreneurial Studies at the University of Southern California

<https://startupcompete.co/startup-idea/consumer-goods-social-entrepreneurship-services-green-it-energy/url----urbanriver-labs/40031>

**My Site** <https://sites.google.com/site/lattcarchitecturetechnology/home>

**COOK Report:** Through contacts with General Bray discussing participation in various HUD programs to train students in the use of these architectural tools as preparation for decently paid work in technology -- early in 2016 — William met Michael Rendler, the effective administrator of the LA program.

The next few months led him to get to know Marcela, the program's creator.

## **From one of our interviews with Marcella**

**Marcela:** Very early on I was motivated by a strong belief in the effect that architecture has on the way people feel about their environment. I saw early on how people can become motivated by their ability to use these tools to create something beautiful. Because I was in a technology program in the community college I saw early on the power of computer-based design capability that incorporated the E7 principles.

Governor Schwarzenegger created a grant project for people who proposed to use geospatial technology in an innovative way. To apply for the grant you had to partner with NASA and I asked NASA if I won if I could work there as a fellow for the knowledge architect.

The first grant was geospatial. In the year 2000 -2001 NASA was very interested in creating what I call a community of practice within the geospatial technologies. I did some work for them (the NASA knowledge architect) in documenting the geospatial technology environment and, after that, we wrote the cyber infrastructure grant. Basically I had to do all that myself without any outside assistance, I was to be the principal investigator if we had won.

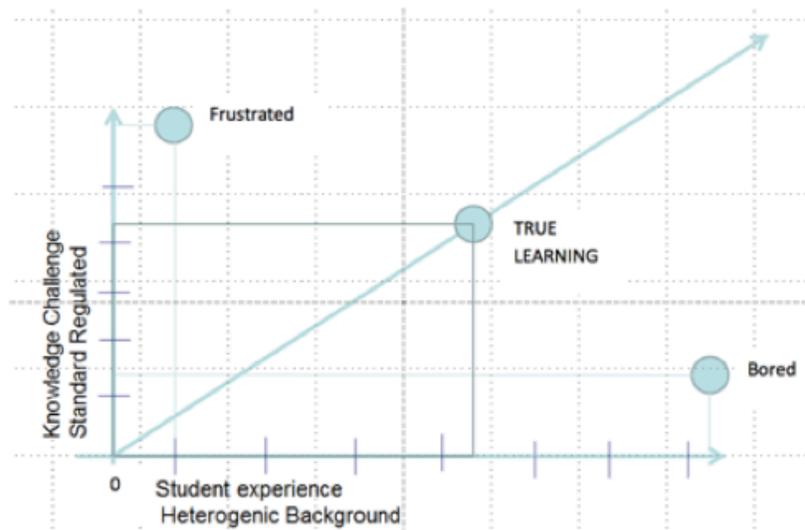
The requirements for the NSF cyber infrastructure grant were very technical and dependent on advanced mathematics. I realization came Cyber One – I realized that I

needed to bring things back more toward my basic educational philosophy and away from becoming involved in the mathematical complexities of quantum mechanics.

I realize now that if somehow I had more time, I would even self publish a book called Cyber One.

Cyber One helped me organize my thoughts in a very tangible way. I wanted to create something that connected digital technology to the economy and to education. My classroom started becoming very productive because my students saw themselves with a "DNA" found in a very well worked out framework -- in the Los Angeles Community Colleges at this time we had students from Russia and from China. This was the creative ability of America coming into focus. I could have, in the same room, an architect from China and someone from Russia with architectural experience. Best of all as I started trying to focus on what became Cyber One I was able to create an environment in the community college or colleges that was based on competence. I was able to create an envi-

The CyberONE environments provide agile and customized solutions for each student; it provides the right proportion and relationship between the task and skill that need to be mastered and the student's background and knowledge



ronment where, based on the curiosity of the student, each student was able to explore and to grow at his or her own pace and not feel bored.

As I began to focus on what became Cyber One and for the first time had advisors for my program I realize that these people knew a great deal about technology and were very interested in what we were doing and then we had a lot of community people who very much desired our mapping services.

**Marcela:** Around 2005-2006 we began to do some services at Los Angeles Trade and Tech. Because of changes in the digital technology involving the role of architecture in things like drafting and the way it had been taught began to radically change as well.

Having moved more towards community-based practice meant I had a network now of students and people affected by our work with the communities in which the students lived. Now at this time I was also a board member for a nonprofit organization, I had been working with the neighborhood councils and, as I worked with the **Neighborhood Councils**, I realize that they needed to make all these urban planning kinds of decisions and yet they (the neighborhood Councils) knew nothing about urban planning it was not even in their vocabulary.

**COOK Report:** Kansas City would do well to create something like a Neighborhood Council. (See Wikipedia Entry page 43 above.)

**Marcela:** They basically have to include anything and everything that happens in their neighborhood. It is a brilliant concept. Because every one of them now has a \$37,000 budget for every year. they have money and power. People not surprisingly pushed back and forth over that.

It was possible to have a Neighborhood Council sponsored or funded architectural project but these involved probably initially not more than 20% of my students and in most other cases what was involved was issues like physical architectural changes to any building or site that had been designated as a historical site.

And my students would come with degrees from other parts of the world and would find themselves connected with sites seeking historic status and they would have to work with those sites according to the demands of local law. What proved very advantageous was that when a student or small group of students became involved in a local neighborhood project like this their very involvement enable them to claim necessary work experience in the United States in order to go on to other projects.

Some small amount of work expended in renovating an historic home would enable them to get their first employment in America. Taking the architecture course and working at a local renovation project suddenly gave them the credentials and acceptance that enabled them to find more regular work. They won and the community won.

I found an increasing number of my students required project-based curricula and services. At first it was 10% and then 20% and then even more. It was quite challenging that

instead of teaching from a book and having a tutorial to actually have a real client where you are teaching students to build and give services to that client.

By about 2004 the project-based service had increased to about 50%. Then in 2005 there was a \$6 billion bond for construction at the night colleges. Then the question became who was going to create the geospatial repository necessary?

Then, based upon what the students were doing in my classroom, I spoke with Chancellor and I spoke with other people and I said why don't you create a program at all the night colleges where all the students help you create categorize and file the necessary geospatial data? This will enable you to make fly throughs so the students and faculty and everyone involved will know what they are going to get.

Everyone said what a great idea. Consequently with all this I could increase the percentage of the class that was a real project to the point where the entire class was such a real project.

Before Michael applied he was an architect, a teacher, and an expert on GIS and virtualization. As a result with the approval of Michael as Director of EZ between 2006 and 2016 using Oracle we created the most sophisticated geospatial repository in the world. In November we're going to London to receive an award for our work in government innovation.

Five years ago we finished and whether we will go for project E7 2.0 is not clear but there will be another bond -- this one for 3 billion. As far as the initial E7 project is concerned the amount of funding for it out of the 6 billion bond was virtually nothing -- simply a fly speck.

So above and beyond endeavors and courses on robotics and that sort of thing what we're talking about here with E7 is that the architectural geospatial development repositories and courses teach student systems thinking. That things are not just built in isolation from each other but built as part of synergistic wholes where over all outcomes depend on interacting parts.

## From Marcela's CyberOne slides

A.CyberONE functions under the parameters specified by **the E7 objectives** below. Attaining these objectives will ensure ACTION a new kind of living, one that is completely connected and sustainable:

### 1. Environment

—Grow smart through synergetic and cybernetic spaces

### 2. Ecology

—Grow green by using renewables and aligning to the Earth's systems

### 3. Economy

—Transform locally by using digital fabrication and manufacturing to local needs

### 4. Entrepreneurship

—Compete globally by using innovation and incubators

### 5. Education

—Transfer knowledge through innovation

### 6. Empower

—Access to creation through nature templates , digital computation and fabrication

### 7. Enterprise

—Use standards, high-end tools, social media, and human potential

**Marcela:** Exactly

**COOK Report:** So your cyber one proposal strikes me as a program upon which you will base a new foundation for an educational system -- a system that should be able to replace the outmoded archaic rote based learning system built more than a century ago two train young people to become factory workers.

20 to 30% community oriented refers to classroom content. We are very heavily regulated in showing that what we do meets learning goals there are many ways to do this



many ways to climb the mountain in other words and for me one of the ways to climb the mountain was to bring in real projects And one of the ways in which you brought in real projects was by getting to know people involved in neighborhood councils yes?

**Marcela** – Yes and wherever possible I would cross disciplines and would have plumbers who wanted to build sculptures by means of their plumbing wherever possible I would increase the percentage of real projects involved. Finally getting to the point now where my entire class is a real project.

The web based gateway of E7 here <http://m.e7studio.net/>

**COOK Report:** So it seems to me that with all these projects you are teaching them systems thinking. Individual buildings are not done in isolation – they are structures using the interworking of different systems.

Marcela designed taught and implemented the original version of the architecture curriculum at LACCD (The LA Community College District). With the availability of funds from

the first 6 billion dollar bond issue the curriculum needed to be formalized under the E7 architecture. That has its own website created by Michael Rendler.

CyberOne strikes me as a conceptual framework designed to implement a completely independent educational system and alternative pathway to our current outmoded models as it were.

## **Mission - e7 objectives**

e7 Architecture Studio is a new approach to education. It's components are: Economic Development , Envisioning Information, Educational Models, Entreprenurial Strategies, Employment Opportunities, Empowering Communities and design build Environmental and Sustainable Cities.

e7 Architecture Studio provides opportunities for hands-on professional development for LACCD students who are close to completing their coursework. Students work in a small environment that is geared towards mentoring and direct work in the field. The e7Studio is under interdisciplinary leadership of architects, artists, programmers, designers, planners, educators and GIS experts. Students work directly under these professionals as e7 Interns. They get a form of education that they cannot get anywhere else. Students are mentored through classes and direct work with professionals who supervise a team of

students. The professional's development adds great value to LACCD by creating work employment for its students.

e7 Architecture Studio is unique to LACCD because of this collaborative. The e7 Studio is also unique because of its blending of technology and media education with work in the field. This ultimately gives the students greater and more varied skills, a broader critical framework to work in and more leverage in the market.

e7 Architecture Studio Interns who provide mapping and design services are talented and highly skilled paraprofessionals from the local community and are in their last semester of their rigorous and creative programs at LACCD.

e7 Architecture Studio Interns and professionals both work with LACCD and directly in L.A.'s neighborhoods to bring a better life to the community and economic development to the region.

**BuildLACCD** ABOUT COLLEGES MEDIA ROOM REPORTS EVENTS OVERSIGHT LABOR & CED CONTRACTORS & BIDDERS

**LATTC – Mariposa Hall**  
View Project

Discover Our 9 Colleges  
EXPLORE THE MAP

**Program Facts**

- \$6.26 Billion total
- \$1.00 Billion to obligate
- 620 Projects completed
- 200+ Projects remaining
- 3 Bond measures
- 9 Colleges
- 250,000 students annually

**620** Projects Completed

**\$4.88 billion** Expended

**\$1 billion** To be contracted

**\$5.26 billion** Contracted

Interested in Doing Business with LACCD?

**PLANETBIDS**

Register with PlanetBids to view and download bid documents

**COOK Report:** This diagram immediately above serves as an entryway to probably two dozen or more separate sets of webpages and websites showing in effect how what Michael and Marcela have developed is made available to students of the Los Angeles Community College District

These two people alone are obviously not solely responsible for the enormous amount of projects and infrastructure involved. Indeed what is described here is in no small part the result of the \$6 billion bond issue that has been financing the development of this Los Angeles educational infrastructure.

Under "partners" is a description of programs for getting jobs in the construction trades. And after this is a separate website called build LACCD which explains help to do business with the Los Angeles Community College District in the submitting bids or projects involved in spending the remaining approximately \$800 million of the \$6 billion bond issue.

The screenshot above is the webpage that describes how the Los Angeles Community College District builds its student designed campuses, in the process undertaking projects that employ a heck of a lot of people.

What's going on here seems to us to be rather impressive. Given the massive amounts of money involved one might also imagine potential power struggles and intrigues that might accompany it. However the processes that accompany all this Los Angeles development are certainly, as far as we can tell, transparent. Moreover, the idea that neighborhoods can be taught how to literally build themselves up by their bootstraps is extremely attractive.

Nevertheless, this has turned into a story that I am not entirely comfortable having to report on. The reason for my discomfort is that the amount of detail and complexity involved in more than 20 years of work on the part of Associates of the Los Angeles Community College District is such that it goes well beyond my ability to recount the efficacy of what has been done in Los Angeles let alone what might be involved in bringing parts or the whole of it to Kansas City.

Becoming familiar enough in enough detail with the work that has been done in the past 20 years in Los Angeles and with what is going on here, **NOW**, simply means that it is not within the power of a single individual to evaluate and judge all this complexity and its history. Although I must say that the founders of this material have laid bare in discussion with me enough information and insight such that at this point in time I simply do

not see evidence of any point or source of failure. The basic principles (openness, transparency and inclusiveness) involved here appear to me to be sound ones.

Given the nature of the World Wide Web and the availability of tools like Google, even casual users will easily ascertain the amazing amount of material that creative people like Marcella can become involved in. For example one of her projects certainly related to the architecture programs and encounters and explained to us in small part at least by Marcela herself is something called: "Urban River Labs."

## Urban River Labs

**Marcela:** This is also what I am trying to capture with my Urban River Labs project. It will be the culmination of the virtualization of the E 7 and the culmination of my pedagogy. I have University of Italy and of Mexico as partners and intend to have one partner for every one of the 51 Miles along the edges of the Los Angeles River. The resulting 51 enterprises are done in such a way as to make the process a major effort in bringing social justice into our community.

Virtualization is one in terms used to reference the digitization of the building designs of students.

The only thing that the 51 universities and other institutions making up urban enterprise zone will do is community-based education.

I have a map showing all the empty lots along the LA River and we are proposing to build one local project along virtually every mile of the river using that map to locate each of the projects. The projects involved in some sense will be similar to those of the Metro Network Labs program. This [URL points to a video](#) showing the river and its surrounding landscape.

This video shows a little bit of what I am trying to implement with the Urban River Labs. The Urban River Labs is designed to create 51 different projects under the control of the neighborhoods surrounding the project location.

**COOK Report:** The concepts involved here are exceedingly impressive and most of them seem to originate with the extraordinary creativity of Marsala Oliva. A woman of genius who appears to be a never ending fountain of creative ideas. What gives pause for thought however in the sense of where the rubber meets the road is. Given the vast sums of money involved in Los Angeles, do these projects have a sound governing structure?

At first pass it would seem that they do. However again as readers unfamiliar with these events look at this material it seems reasonable to conclude that there is no way of telling exactly what sooner or later might be found.

## Two more examples of students whom William has mentored

Jalyn KeybladeMaster Lewis and Royale Boy Blue are examples of what he is teaching the youth of Kansas City. <https://www.gofundme.com/23jgjsmk> and <https://www.facebook.com/RoyaleBoyBlue/>

“Hello everyone! I am a junior apart of the #1 high school in Missouri and my Chinese class is going to China in 2018 on the spring break of my **senior year**. My father said if I can raise enough money then I can go too and I will not feel left out. My chinese teacher tells me that when I speak chinese it doesn't sound like I have an accent and that I speak really good! This trip means so much to me because China is a place I have always wanted to visit, create a memory for my best friend that stepped in when others did not, and to prove to my family that I will become something like a game designer or animator one day by working hard and believing myself! Knowing this trip **and college** is coming up, I would be so thankful if I can have enough money raised so I can graduate as a senior with this trip driving me on. If there is anything I can tell any child or highschooler like me, it is to **believe in yourself and work hard to go places**. If this works, I can prove to anyone that work pays off! literally! ”

**Royale Boy Blue**  
@RoyaleBoyBlue

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<http://www.RoyaleBoyBlue.com/>

## Chapter Six

# "Encounter Kansas City Urban Innovation Labs"

**COOK Report:** The next step for William in his development of the alternative pathway is to link the emergence three entities - of (1) University of Missouri-Kansas City, (2) City of Kansas City and (3) Kansas University led MetroLab Network projects to a strategy for perhaps what looks like a new Kansas City MetroLab Network project only because the funding here is likely to come from other resources with the difference being that the funded entity is called: "Urban Innovation Lab" rather than MetroLab Network.

It seems that what William wants to build is several "Encounter Kansas City Urban Innovation Labs" that are supported in KC by local universities, community colleges and local government. This is a strategy for inclusion with the hope that successful collaboration will produce the kind of results conceptualized in the Encounter Kansas City, Encounter LA Think Tanks and implemented in the Urban Innovation Labs that will inevitably spring up throughout the Kansas City and Los Angeles metropolitan areas, especially in HUD communities that are recipients of the [HUD ConnectHome initiative](http://connecthome.hud.gov/). <http://connecthome.hud.gov/>

\*\* ConnectHome is a **public-private collaboration** to **narrow the digital divide** for families with school-age children who live in HUD-assisted housing. ConnectHome is the next step in President Obama's continued efforts to bring **affordable broadband access, technical training, digital literacy programs, and electronic devices** to all Americans

ConnectHome is supported in KC by the Housing Authority of Kansas City, UMKC School of Law and in LA by e7 Architecture Studio and EncounterLA.

With this then as an introduction, what follows is how William phrased his proposal on September 30:

## **Encounter Kansas City Urban Innovation Lab**

### **Project Description:**

EncounterKC is a new model that helps connect the classroom to the outside world and vice versa by transforming the built environment through projects that are designed, built, maintained and exhibited by local talent.

The Urban Innovation LAB uses simulation and virtualization to look at complex ecosystems using Machine Intelligence and Computer Vision to prepare next generation Knowledge Workers for real-time, rapid prototyping, concept to market product development.

We will demonstrate that next generation design, programming and fabrication will use a different model. This workspace will demonstrate how DISRUPTIVE this new model is regarding the largest sector in USA for Job Opportunity.

It will demonstrate problem solving using collective intelligence across a sophisticated set of machines, coding, and fabrication work flows. Participants in this LAB will produce a systems approach to understanding Structure, Programming, and real-time augmentation into a set of controls to optimize a solution based on real-time data.

### **Outcomes:**

aSTEAM Village will use assessments to determine inhibiting deficiencies for student completion, and individual partners will determine at what level they will be placed into our program. Initial assessment will focus on Math and Reading competencies for aSV programs. If a deficiency is found in these skills, strengthening these sets will precede the essential IT core competencies that will be the baseline for success. Only then can they take their first upward trajectory step towards pursuing an IT education or career pathway.

After completion of the baseline eligibility assessment, staff will direct aspirant to one of two paths:

Intensive job coaching to direct placement by Sector Staff who focus on the IT industry;

Short-term or accelerated credential training leading to placement which includes strategies such as paid work-experience placements, paid internships, and On-the-Job Training; or training along a pathway that leads to placement through an educational partner.

### **Sustainability:**

Program sustainability occurs as fully prepared individuals enter the workforce or post-secondary education pathways where their expanded tech knowledge/newly acquired skills empower them to solve real-world problems as participants in the knowledge/information economies of today and tomorrow.

Participants will use their talents to better their community by designing solutions directly benefiting their neighborhood. A clear pathway to a career occurs only when they are not simply receiving information, they are confidently capable to design, engineer, test, and create their own inventions from their ideas. Thus, we have a community of producers; not just consumers.

Encounter Kansas City's impact on sustainability will be driven by the collaborative meetings where people find like-minded partners, give presentations, share resources and dive into group activities. Members will come from a spectrum of fields, such as community development, criminal justice & environmental activism. Some have thriving businesses, others are pioneering new concepts--all will be welcome!

Mr. Luppino, thank you in advance for considering our request for your Letter of Support and being apart of the Encounter KC and LA Urban Innovation Labs initiative.

**Editor's Note:** With the term Urban Innovation Labs. William acknowledges that he is borrowing for local project name that nationally was initiated by the Aspen Institute. See: <https://www.aspeninstitute.org/programs/urban-innovation-lab/>

## Chapter Seven

# Google Fiber and Housing Authority Connections in Kansas City

In 2013 initially there was a \$300 one time connection fee for a special five dollar a month low income service when the Google fiber rollout got started. This led to the situation we have already written about where Aaron Deacon used his social network contacts to pay the \$10 fee for intended fiber sign-ups that were necessary for an area (including a housing authority complex) to become a "fiberhood." Prior to Aaron's involvement, this was not exactly a smashing success and it only served to emphasize how Google had miscalculated the ability of low income Kansas City residents to even afford a minimal fee for an Internet connection or the willingness of landlords to pay the nominal fee and consider it an amenity that they would pass on to their tenants.

However in 2014 Google Fiber in Kansas City made a smart move in acquiring the services of longtime Kansas City resident Rachel Hack Merlo. She is Google's Community Manager for Kansas City. As she told her interviewer: Our local presence centers around Google Fiber, and my job is a little bit of everything [except] directly constructing or selling the product. I am the point of contact for local governments and other partners, work cross-functionally with divisions of Google Fiber to keep the Kansas City work on track, and oversee local community affairs. Our community involvement primarily focuses on digital inclusion, STEM education, and entrepreneurial/startup community engagement." "Before Google, I was the president of the Software and Information Technology Association of Kansas, which has since become KCnext." <http://www.kcpt.org/entrepreneurship/profile-rachel-hack-merlo-google/>

Now by the time of our visit to Kansas City in June 2014 Michael Limatta of Connecting for Good had achieved a trial connection for a Housing Authority across the state border in Kansas City, Kansas. This was one that was not publicly announced at the time because it went beyond the borders of Google's announced policy. But by later in 2014 plans to connect Housing Authority properties in Austin Texas were proceeding and, under Rachel's leadership in Kansas City Missouri, plans proceeded for what became a welcome July 2015 notice that Google was pledging to connect up to nine Housing Authority properties in the greater Kansas City area. Google has fulfilled this commitment with the Housing Authority of Kansas City.

## Bringing Internet Access to Public Housing Residents

Wednesday, July 15, 2015

In July 2015 under the HUD connect home program the Kansas City wide announcements were made that set a foundation for what could become the superb metropolitan area high-speed network that William Wells envisions here to connect his Neighborhood Innovation Centers.

[The Google fiber blog](#) proclaimed that "As many as 26% of households earning less than \$30,000 per year don't access the Internet, compared to just 3% of adults with annual incomes over \$75,000. Google Fiber is working to change that. Today, in all of our Google Fiber markets, we're launching a program to connect residents in select public and affordable housing properties for \$0/month with no installation fee.

This initiative is part of ConnectHome, a digital inclusion and literacy program launched by the White House and U.S. Department of Housing and Urban Development (HUD) that aims to bring Internet connectivity to more school-aged children and families living in HUD-assisted housing in 28 communities across the country. We're proud to partner with HUD to connect families in four of the communities they've selected—Atlanta, Durham, Nashville and Kansas City. We'll also extend the program to every other current and future Google Fiber market. We realize, though, that providing an Internet connection is just one piece of the puzzle. People can only take advantage of the many benefits of the web when they understand why it matters and know how to use it. That's why we'll also partner with ConnectHome and local community groups to develop basic computer skills training and create computer labs to host these trainings in each of our Fiber markets.

**This program was inspired by our work with the Housing Authority of the City of Austin (HACA) on their Unlocking the Connection initiative.** Through the initiative, HACA has led collaborations with Google Fiber, EveryoneOn.org, and local community groups such as Austin Free-Net and Austin Community College to help residents of HACA communities sign up for \$0/month Internet connection, enroll in digital literacy classes and access computers—all at no cost. HACA residents have embraced this program. At Manchaca Village, the first public housing property we engaged, over 90% of residents signed up for service, and more than half of the residents completed digital literacy training. With support from local organizations and city leaders, we hope to see this same kind of success across the country."

Google is also supporting annual crops of digital inclusion fiber fellows via an NGO named the nonprofit technology network. This group recently announced 22 for 2016. The programs though worthy are generally narrower and work with a single NGO in a given area as opposed to the much broader based effort that William is creating..

What is outstanding is that Google via HUD ConnectHome is bringing fiber connections to all housing authority locations.

What is outstanding is that google via HUD connect home is bringing fiber connections to **all** housing authority locations.

### [Connecting public housing, at gigabit speeds \[in Kansas city\]](#) **Google Fiber blog - Wednesday, February 03, 2016**

At Google Fiber, we often talk about how superfast speeds and access to home broadband can move entire communities forward. For low income families, access to the Internet can mean the difference between thriving or falling behind. It can mean more children using computers in after-school programs and STEM classes, more students going online to finish their homework, more people taking advantage of resources like Khan Academy, and more families learning basic computer skills that help them be more connected. That's why last year, we partnered with ConnectHome, an initiative by the U.S. Department of Housing and Urban Development (HUD) and the White House to accelerate Internet adoption by families with school-age children in public housing. Today, alongside HUD Secretary Julián Castro and local partners, we're proud to take another step in that commitment by announcing that we'll be bringing gigabit Internet service to residents in all public housing properties that we connect with Google Fiber. Families in these properties will be able to access some of the fastest speeds, at no cost to the housing authority or to residents.

Affordable housing residents can sign up for service using a process that makes it easier to bring the Internet home. Working side-by-side with the Housing Authority of Kansas City, we're launching the program today at West Bluff, the first property to receive gigabit Internet as a part of this program. We've wired all 100 homes with Fiber, and families can sign up today to access the Internet at up to 1,000 Mbps. And through local ConnectHome partners, such as Connecting for Good and Surplus Exchange, they'll also be able to purchase discounted devices and learn new computer skills. Across Kansas City, we're working with local affordable housing providers to connect up to nine properties, reaching more than 1,300 families in the metro area.

### **The first of Many Encounter Kansas City Urban Innovation Lab sites to come is 63rd and Rockhill Rd. where Google Fiber is Already Installed.**

**William Wells** on October 23 2016 pointed out that he hoped that the property at 6301 Rockville Rd. owned and managed by Daimon Abnos could serve as the first central

node of his Encounter Kansas City Innovation Lab network. There would be a network node in each of the Housing Authority locations, each middle and high school, churches and other youth serving NGOs throughout Kansas City, MO and KS.

**Wells:** What I hope for with the sites running over Google Fiber from several locations, all of which will be interconnected and interdependent is that there will be many Encounter Kansas City Innovation Labs throughout the city. As a result — all that the computers will need to talk to each other is the Google Fiber connectivity that will supply all the bandwidth needed.

What is outstanding is that Google via HUD ConnectHome is bringing fiber connections to **all** housing authority locations. Google's Community Connect has already delivered gigabit connectivity to many city sites, public, private and charter schools and business incubators. Since all of these locations are on the same Google Fiber network, they can all easily be networked together into a self-contained virtual network that can power all the programs that William is designing on behalf of aSTEAM Village.

The locations which are referred to as Innovation Labs are the ConnectHome Computer Centers in the HAKC & KCKHA communities, public and charter schools like Benjamin Banneker Charter Academy of Technology and Central Academy of Excellence, youth serving organizations like W.E.B. DuBois, KC Public Library, faith-based organizations like Macedonia Baptist, St. James AME, Reconciliation Services and post-secondary institutions like UMKC, MCC Longview. Innovation Labs can even be held in community organizations like Operation Breakthrough, Sprint Accelerator and ThinkBig co-working space. [**Editor:** while the cost of the ConnectHome connection to the Google fiber network is presumably paid for by the HUD ConnectHome program, other eligible connection sites may be connected on their payment to GOOGLE of the cost of the connection.]

The Encounter is where the idea creation and collaboration happens and the Innovation Lab is where the design, visualization, data collection and build occurs.

The output of the Encounter Kansas City Innovation Lab is to take the classroom to the community and the community to the classroom. Thus, real projects that solve problems within the community are being solved by members of the community who are simultaneously gaining tech skills and industry certifications as they work and learn on real projects. Thus enabling one to be fully qualified for the economies of today and tomorrow. From this newly generated pool of talent of included citizens will come innovation and economic growth.

This newly created talent pool of diverse, interconnected and interdependent workers is what now drives economic development for the city because companies will come for the Google Fiber infrastructure and the pipeline of talented workers who begin in K-12 through aSV and enter into the Innovation Lab, post-secondary education system or the

entrepreneurial ecosystem fully equipped and engaged with real world digital skills that provide real upward mobility pathways.

Connecting For Good (CFG), Full Employment Council (FEC) and others can engage the niche of that 18 - 55 year old who needs entry into the workforce through skill development.

Literacy KC, W.E.B. DuBois and the public, charter and private school systems still focuses on getting the basic skills necessary to even embark on a digital journey that will move them through a pathway of now I can read, write and do math, now I can go to FEC and CFG and get my basic digital literacy skills and then I can enter a Innovation Lab or LaunchCode and then exit at a fork in the road that has three on-ramps, 1) post-secondary education at a community college or university, 2) into the workforce as a qualified, digitally literate I.T. candidate or 3) into the I.T. entrepreneurial space.

This is my clear picture of a tangible solution for one's upward mobility to inclusion and participation/entry into the 21st Century I.T. workforce."

**COOK Report:** Google is supporting annual crops of digital inclusion fiber fellows via an NGO named the nonprofit technology network. This group recently announced 22 2016 [new digital inclusion fellows](#). The Google-supported programs, though worthy, are generally narrower and work with a single NGO in a given area as opposed to the much broader based effort that William is creating.

However putting all of these events together leads to a scale and scope beyond what we have encountered so far. What is being constructed is designed to perform as a flexible alternate pathway of education training and job development for the Kansas City urban area's youth from middle school to college graduate. It will include a series of best practices gathered from different locations around the United States where nominally independent entities are joining in the coalition that William has put together.

We expect that it should be able to produce tangible forward-looking change that will be able to make a much-needed difference because it has been designed from the ground floor up to include the most current and up-to-date best practices necessary to back and underwrite the education of young people and produce a positive impact on local society. An impact that should be extremely productive because it cuts across disciplines and combines forward looking programs that are already productive in their respective areas of operation.

*William offers the following metaphor: we know that we want to make a pepperoni and sausage pizza so that we can eat. We are at the stage where we are getting all of the in-*

*gredients together (key stakeholders), so that we can follow the recipe, make the pizza, put it in the oven so the people (youth, citizens, businesses) can eat.*

## Chapter Eight

# About MetroLab Network

**COOK Report:** One of the things that William will certainly be developing is a Kansas City version of a program like this. The people listed as principal investigators on the seven projects detailed chapter 8 will need to avail themselves of William's ability to ally each of their projects with the particular neighborhoods in the city where the projects need to focus.

## About MetroLab Network

**From the announcement of the program at Carnegie Mellon:** MetroLab Network is a group of more than 35 city-university partnerships focused on bringing data, analytics, and innovation to city government. Its members include 38 cities, 4 counties, and 51 universities. The Network's mission is to pair university researchers with city policymakers to undertake research, development, and deployment projects that improve our infrastructure, public services, and environmental sustainability. The Network was launched as part of the White House's Smart Cities Initiative in September 2015.

### A city-university collaborative for urban innovation

MetroLab Network includes 38 cities, 4 counties, and 51 universities, organized in more than 35 regional city-university partnerships. Partners focus on research, development, and deployment (RD&D) projects that offer technological and analytically-based solutions to challenges facing urban areas including: inequality in income, health, mobility, security and opportunity; aging infrastructure; and environmental sustainability and resiliency.

City-university partnerships are mutually-beneficial relationships in which the university is the city's R&D department and the city is a test-bed. Faculty and students get access to real-life laboratories to test advanced approaches aimed at addressing city priorities and challenges. Cities, and their residents, benefit from technologies and policies that leverage digital and information technology, data analytics, sensing, and more.

Individually, city-university RD&D partnerships are beneficial and help drive innovative approaches in government. When networked together, they present an opportunity to scale effective solutions, accelerate best practices, and advance the understanding of urban science. This primer includes 10 Principles for Successful City-University Partnerships for Urban Innovation.

**COOK Report:** Most of these projects are neighborhood in scale and therefore ideally suited to partnerships with city government as well as the University as well as the locally funded NGO. They will function as a three-legged stool with one leg and the University the second in city government and the third in the local community served by the NGO. A mixture of students and young adults that can be used to go out into the neighborhood and gather the necessary support data and wisdom.

The Metro Lab Network projects are unusual in that, unlike the gigabit city projects, they involve city governments in partnership with universities in the cities in question. Here ***the public private partnership does not involve linking a monopoly oriented rent seeking telecom company to privately owned resources.*** Taxpayer-funded resources are channeled into places where development is still sufficiently flat in such a way as to give the more casual observer the impression that the new telecom resources are not mandatory requirements. The projects are still small enough in scale such that local students being mentored by someone like William can become a good fit for going out and gathering needed information.



## **Metro Networks Gateway projects in Kansas City Kansas City, MO/Kansas City, KS: Smart City Overlay on Healthy Campus**

**University of Missouri – Kansas City, University of Kansas**

This project will develop a “Healthy Campus”—a defined mixed-use area in Kansas City, KS, that clusters assets to measure public health benefits. “Smart City” components to the Campus made up of a community center and a grocery store will include: widespread wireless/wifi connectivity throughout the campus footprint, physical touch dog points within the campus for health information and service, and data integration of personal devices and public sensors. UMKC’s Center for Health Insights will use analytics to leverage environmental sensors in a public health context and will work with Campus to optimize the tech integration with a focus on outcomes.

### **CONTACT**

**Aaron Deacon Managing Director, KC Digital Drive**

**Paola Sanguinetti Department Chair, School of Architecture, Design & Planning, University of Kansas paolas@ku.edu**

### **Kansas City, MO/Kansas City, KS: Food Access: A CBPR Visual Ethnography University of Kansas**

This project will identify the spatial barriers to accessing affordable and nutritious food for women enrolled in the WIC program in Wyandotte County. The goal will be to build a qualitative visual narrative informed by participant perceptions through video interviews as they travel to their nearest grocery store. These visual transcripts will then be coded and represented as card sorting exercises for residents through a series of community workshops in partnership with the Unified Government of Wyandotte County’s Health Department.

Working with WIC, KU SADP and KU School of Public Health taught a joint class to identify and survey 8 non-WIC stores in the focus population, considered as the most dense urban area of Wyandotte County, and home to over half the county's population. The class identified three stores that carried enough WIC food items to be considered as potential WIC applicants. Those three stores are now working with the Dotte Agency to apply for WIC and prototype grocery store shelving units that promote fresh food.

**CONTACT Matt Kleinmann PhD Candidate, University of Kansas mkleinmann@ku.edu**

### **Kansas City, MO/Kansas City, KS: PlanIT Impact**

This project will implement a web application that will allow designers, planners and stakeholders to better understand building or site performance with regard to energy and water use, storm water infiltration, greenhouse gas emission, proximity to public transportation, quality of place, potential return on investment, and more. The goal will be to bring information into the design process to generate performance calculations in an immersive 3D environment. The project will include both Kansas City, MO and Kansas City,

KS to identify opportunities for development projects in the pipeline, including the Healthy Campus in Kansas City, KS that is part of the GCTC Action Cluster.

**CONTACT Eric Roche Chief Data Officer and Performance Management Analyst, City of Kansas City, Missouri [Eric.Roche@kcmo.org](mailto:Eric.Roche@kcmo.org)**

**Dominique Davidson PlanIT Impact [ddavidson@planitimpact.com](mailto:ddavidson@planitimpact.com)**

## **Kansas City, MO/Kansas City, KS: Smart Cities/Urban Living Lab and Privacy Regulation**

### **University of Missouri – Kansas City**

This project will implement a comprehensive Smart City Initiative along the downtown streetcar corridor of Kansas City, MO. The goal will be to obtain input from 311 phone calls, utility information, crime, etc, to highlight privacy concerns from citizens and provide confidentiality levels of understanding from the City's perspective. This project will combine research and the building of a multi-function and searchable electronic platform to help the City's Law Department provide guidance on City governance.

**CONTACT Kathleen Garman Innovation Analyst, Kansas City, Missouri [Kathleen.Garman@kcmo.org](mailto:Kathleen.Garman@kcmo.org)**

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**Tony Luppino Director of Entrepreneurship Programs, UMKC School of Law**

## Chapter Nine

# The Architecture Encounter LA Curriculum – a Parallel Version of Which to be Developed in KC

These pages portray the highlights of the E7 architecture curriculum developed at the Los Angeles Community Colleges by Michael Rendler. The pages that follow represent an intensive multigrade curriculum in the application and development of architectural drawing development and systems software developed by Rendler in Los Angeles and currently open for development by William in Kansas City.

The start of the porting of the software to Kansas City will be undertaken during the meeting in the building at 6301 Rock Hill Rd. in Kansas City on November 10, 2016. It seems reasonable to say that this goes far beyond the scale and scope of any **similar** thing to be attempted heretofore in Kansas City.





e7 Architecture Studio Interns who provide mapping and design services are talented and highly skilled paraprofessionals from the local community and are in their last semester of their rigorous and creative programs at LACCD.

e7 Architecture Studio Interns and professionals both work with LACCD and directly in L.A.'s neighborhoods to bring a better life to the community and economic development to the region.

## Proficiency - Skills Development

e7 interns come from various academic backgrounds. Some are currently working towards a 2-year or 4-year degree, while others have completed a Bachelor's and are looking for skills development that falls within their academic field, or even outside of it if they have decided to change their academic or professional path.

While at e7 Architecture Studio interns develop a wide array of technical and life skills. They are required to be enrolled in at least 6 units at any of the LACCD campuses and must learn to balance the demands of school with those of work. e7 interns work with some of the latest computer software available in the architectural and engineering fields, and become proficient in working with these programs.

Once graduated, e7 interns leave with a sharpened set of skills that allow them to transition seamlessly to other academic and professional pursuits. **Editor's note:** The remainder of this chapter provides a tour through the component parts of the basic E7 webpage shown on page 72 above. Each of the following headings has its own page and at the bottom of each page are additional options labeled images video and other. We have included screenshots of each of these options for each subsection. Please note also that under partners, the PVJOBS page contains important explanation of the studio structure and process.



## PVJOBS

"As an integrated educational model, e7 dedicates itself to a range of projects and is composed of five distinct internship teams, each team led by professional staff:

**Computer Aided Design (CAD)** - The CAD team focuses on preparing, maintaining, converting, scanning, storing and organizing existing paper or digital drawings and related building/infrastructure documents into a digital repository with searching capabilities for easy retrieval and management. The CAD team also supplies 2D/3D drawings to the GIS team to be incorporated in the web-based GIS system, and to the Architectural Visualization (VIZ) team to be used in renderings or fly-through graphics. Additionally, the CAD team works with Building Information Modeling (BIM). By managing real world data and modeling actual parts and relationships in 3-D, e7 can help maximize design, installation, commissioning and operation.

**Architectural Visualization (VIZ)** - The VIZ team creates photo realistic renderings and animations to help visually communicate the intention of design professionals to the user community. The VIZ team contextualizes the design from 3D CAD or BIM files, setting the flyover camera and walkthrough views to highlight the main design features.

**Geographic Information Systems (GIS)** - The GIS team is focused on populating a web-based interactive system for the maintenance of District wide facilities and infrastructure. The primary advantage of this system is to simplify human interface tied to geo-reference information. GIS technology allows e7 to use real world coordinates to analyze and display the elements associated with any given building and its actual global location.

**Systems Solutions (SS)** - The SS team is the backbone of the e7 Studio. Their mission is to develop, support, maintain and protect e7's hardware, software and data sets. The SS develops a GIS web-based interactive system and integrates many of e7's deliverables by facilitating an interoperable environment. The SS team provides a wide range of opportunities in software development, databases and web technologies.

**Interactive Multimedia Team (IM)** - The IM team aims at creating media experiences with interactivity at its center. The IM team incorporates video, animation, music, web pages and large scale imagery to deliver an educational, touch screen kiosks project." To view some of the work e7 Architecture studio is doing, visit <http://streaming.e7studio.net/?display=01C#>

**Eligibility** Students who enroll in the LACCD Interns Program are eligible to work at the e7 Architecture Studio.

## Process

Once enrolled in the LACCD Interns Program, program staff will query the database of completed applications to match your interests and career-goals with available opportunities, including work at the e7 Architecture Studio. If you have the necessary skills sets and/or fields of study, your resume will be forwarded to e7 program staff for possible interview and hire.

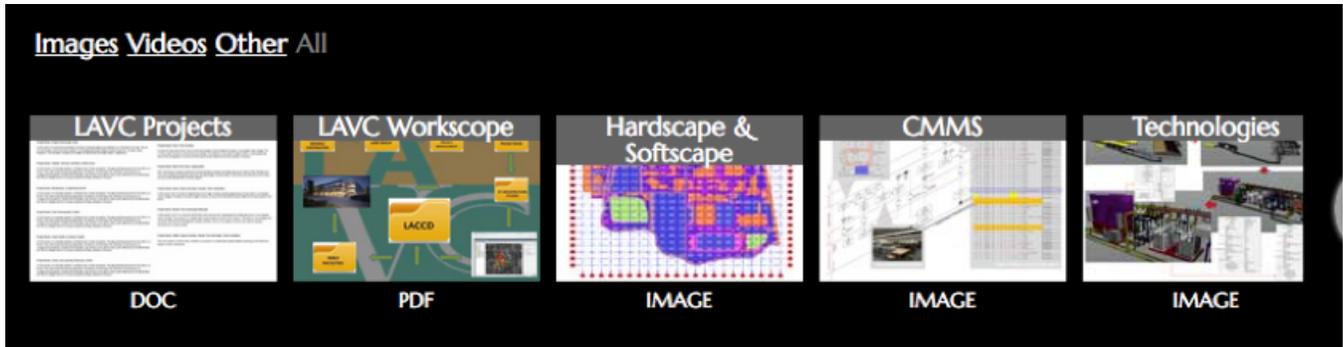
## BuildLACCD

This is the Contracting and accounting page mentioned on page 59 above. <http://www.buildlaccd.org/>

The screenshot shows the BuildLACCD website interface. At the top left is the BuildLACCD logo. To its right is a navigation menu with links: ABOUT COLLEGES MEDIA ROOM REPORTS EVENTS OVERSIGHT LABOR & CED. On the far right is a yellow button labeled 'CONTRACTORS & BIDDERS'. The main banner features an aerial view of the LATTC - Mariposa Hall building with a 'View Project' button. To the right of the banner is a map titled 'Discover Our 9 Colleges EXPLORE THE MAP' with logos for various colleges including Pierce, LA, LATTC, West, and ASU. Below the banner, the 'Program Facts' section lists: \$6.26 Billion total, \$1.00 Billion to obligate, 620 Projects completed, 200+ Projects remaining, 3 Bond measures, 9 Colleges, and 250,000 students annually. To the right of these facts are four lightbulb icons with icons inside (a leaf, a pencil, a house, and a mouse). Further right are statistics: 620 Projects Completed, \$4.88 billion Expended, \$1 billion To be contracted, and \$5.26 billion Contracted. At the bottom right is a green advertisement for PlanetBids, stating 'Interested in Doing Business with LACCD?' and 'Register with PlanetBids to view and download bid documents'.

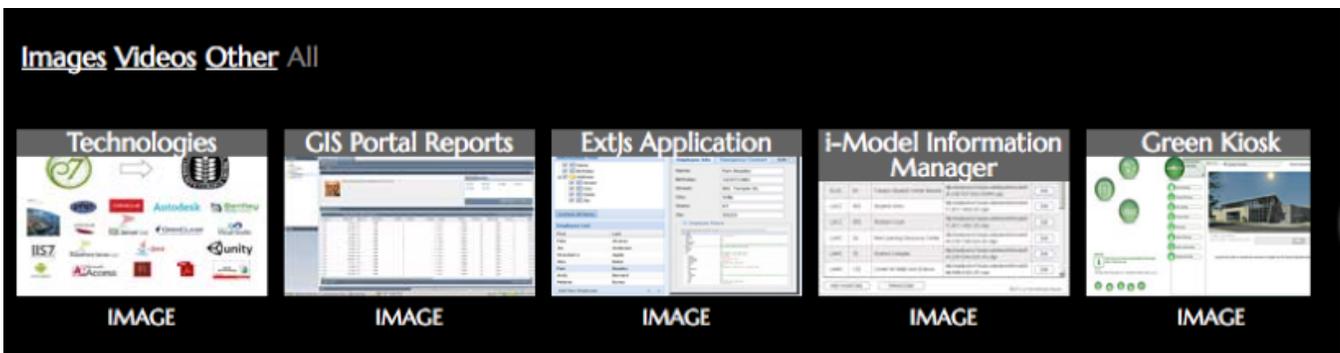
## Teams - Modelers

The modelers at e7 Architecture Studio work on-site at each of the LACCD campuses. The modelers gather necessary information about historic, completed or in-construction



campus facilities. This information facilitates the development of the Geospatial Data Models created at e7.

Modelers are e7 intern graduates and are selected based on the proficiency with project management attained during their one year internship. They have shown skills in information research, process documentation, communication documentation and discussing and tasking work in a critical path structure to complete project deliverables in a



timely manner.

## Teams - System Solutions

The System Solutions group at e7 is in charge of technology development. The team integrates web servers, databases, GIS server, web technologies (Sharepoint) and mobile technologies (Android). It also develops web applications and services, desktop applications, gaming applications and apps for the Android such as the GIS portal, the Green Kiosk, BIM model websites and in-house tools. System Solutions is also pushing data integration to mobile platforms. e7 mobile products include the Green Kiosk and applications using the Unity game engine.



## Teams - Tier 2

The Tier 2 team is concerned with the development of the [Game](#), [Kiosk](#), [Animation](#) and [Energy](#) products. While the Tier 1 team makes models, the Tier 2 team puts these models to use in the aforementioned products.

Individuals who are part of the Tier 2 team must have a strong knowledge of construction documentation and of architectural, mechanical, electrical, plumbing, civil and tele-com industries. They also develop skills in the following programs: 3dsMax, AutoCad Architecture, Bentley Building Electrical Systems and Unity Game Engine, among others.

## Teams - Tier 1



The Tier 1 team is responsible for creating models through the [Building Information Modeling \(BIM\)](#) process. These building information models are made through Computer Aided Design (CAD) using a variety of software, including those within the AutoCAD and Bentley System suites. Once the models are completed, they are used to make the [Geographical Information Systems \(GIS\)](#) products.

The Tier 1 team is also responsible for managing the digital repository of LACCD's original construction documents and contracts. They digitize this information so that it can be stored, organized, scanned and queried from a single database.

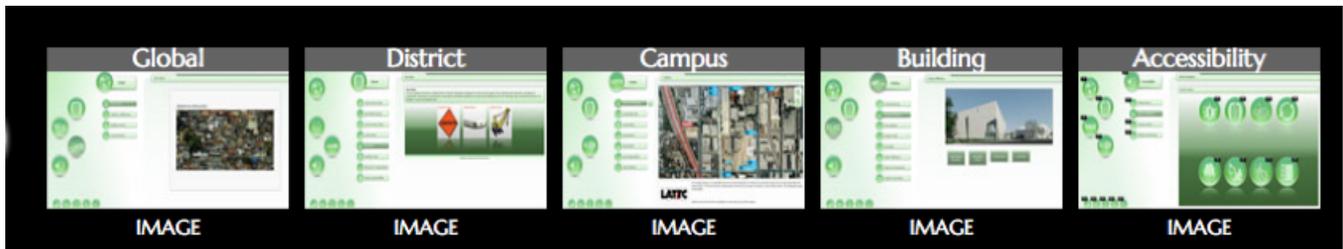
## Products - game



Project Unity provides opportunities for hands-on professional development for LACCD students who are able to utilize 3D application and computer knowledge.

Project Unity is an ultimate solution to integrate existing 3D model's information into a virtual environment. The system features analyzation tools for security training, environmental studies, landscape planning and virtual tours.

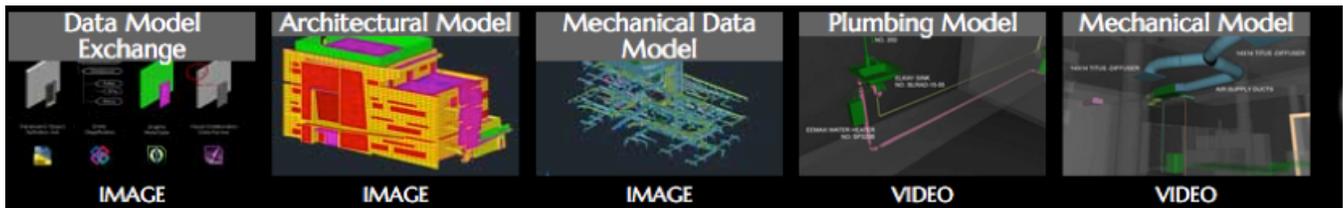
## Products - kiosk



The Interactive Design team is committed towards creating a multimedia-based Green Kiosk platform to educate the community about sustainability within the building environment. The Interactive Design team utilizes the information generated from the GIS maps, CAD building information models, System Solutions Silverlight Development, and Visualization tools in order to produce an interactive green building case study.

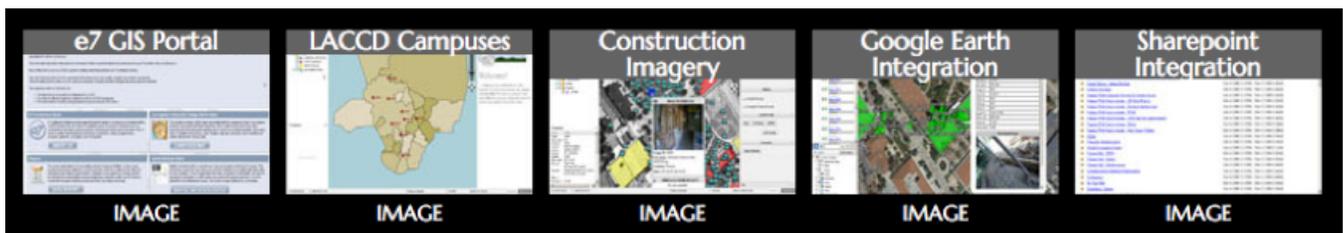
So far e7 Architecture Studio has deployed 15 Green Kiosks across several LACCD campuses.

## Products - BIM



The Building Information Modeling (BIM) team focuses on preparing, maintaining, converting, scanning, storing and organizing existing buildings and infrastructure. Construction Documents and Building Information Models and related documents are stored in a digital repository with searching capabilities for easy retrieval and management.

## Products - GIS



e7 Architecture Studio has built the spatial repository of all facilities across the campuses of the Los Angeles Community Colleges District. Through a unified web interface that uses Sharepoint, Startpoint and database technologies, facility staff manage their buildings and get access to documents, drawings and models.

The primary advantage of this system is to simplify human interfaces tied to geo referenced information.

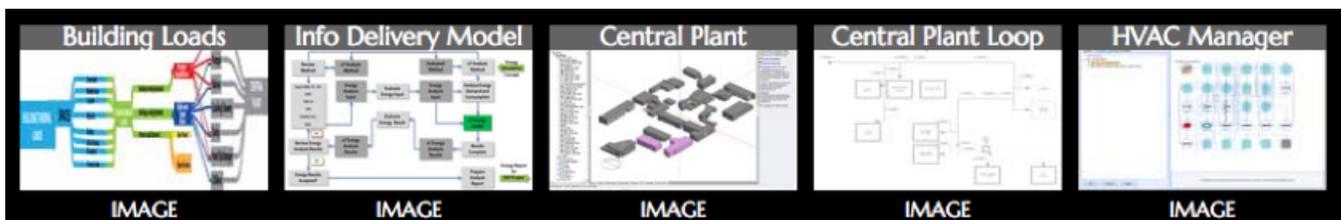
GIS technology allows e7 to use real-world coordinates to analyze and display elements associated with any given building and their actual global location.

## Products - Animation



The Visualisation (VIZ) Team creates photo-realistic renderings and animations to help communicate visually the intention of design professionals to the user community. The VIZ team contextualizes the design from 3D CAD or BIM files and sets the flyover camera and walkthrough views to highlight the main design features.

## Products - Energy



The energy team provides analytical simulations of building performance data in comfort, climate, daylight, and energy uses. The analysis is generated through carefully constructed energy models. The modelling allows optimization and energy saving strategies during building design and after construction. Models are used to investigate how the energy consumptions and demands of the building environment involve heating, cooling, lighting, and equipment loads. The concept is to look at strategies that will help reduce the energy usage and demands.

In addition to modeling, the energy team gathers environmental and building data. The data gathered comprises location, envelope, internal gains, schedules, and mechanical

systems. As a result, the energy team can help predict and understand the energy consumption of the building environment.

**COOK Report:** We include this material here at the end of our initial report to serve as a guide for the thinking of the groups that William is reaching out to those specially also who will be attending the meeting. Here is a summary of what appears to us to the key differences in what William is doing in comparison to what any similar attempts that have gone before in Kansas City.

There is a significant difference between William's alternative path and other programs we have observed in Kansas City. William's path is really a well thought-out series of programs designed to be interlinked together into a coherent whole. His robotics programs can accept participants as young as first-graders but are most focused from middle school through college. They are designed to offer a wide range of activities that can be used in learning STEM and Arts making up aSTEAM Village.

When he sees something or someone that can enhance the development of a "student" in the job and career training process — LearnKey software for example — he works to incorporate it into a comprehensive process of the development of workforce skills. Additional examples being the networking processes of the Encounters and the addition of the architecture software approaches to prior experience with robotics – the former being something that will involve participants in his program(s) in the experience of intensive networking and offer the opportunity for them to be able to engineer welcome physical improvements to the neighborhoods in which they live. There is an overall focus to his pathway and that is that everything is done with the singular goal in mind of qualifying the participants for gainful employment.

## **What would a new parallel system look like?**

**CyberONE** is a multifaceted effort to engage all challenges facing our communities today. This revolutionary partnership will leverage natural resources, technologies, and investments to change our neighborhoods and support the national infrastructure. This new, integrated information will enable informed decision making at all levels of society. It is a low cost investment and a very powerful change. It will help to mitigate issues pertaining to finance, natural disasters, climate changes, security, health, science, dilapidated neighborhoods, high school dropouts, and poverty. A.CyberONE functions under the parameters specified by the objectives below. Attaining these objectives will ensure

**ACTION** a new kind of living, one that is completely connected and sustainable:

1. Environment  
—Grow smart through synergetic and cybernetic spaces
2. Ecology  
—Grow green by using renewables and aligning to the Earth's systems
3. Economy  
—Transform locally by using digital fabrication and manufacturing to local needs
4. Entrepreneurship  
—Compete globally by using innovation and incubators
5. Education  
—Transfer knowledge through innovation
6. Empower  
—Access to creation through nature templates , digital computation and fabrication
7. Enterprise  
—Use standards, high-end tools, social media, and human potential

**ASK** questions **across departments**, disciplines and colleges

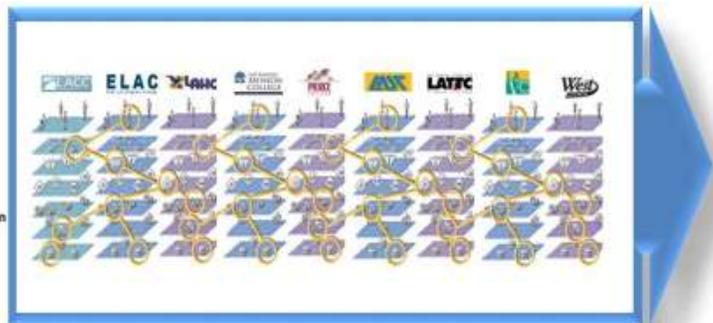
**CREATE** a process for **real time** participation on meetings, agendas and outcomes

**TRACK** **live updates** of faculty professional development and students' need

**INFORMATION** of socio economic forces locally and globally

**OPTIMIZE** value of existing data and facility information for scheduling and space utilization

**NAVIGATE** **common operating services** to the community



ARCHITECTURE

## Chapter 10

# The Components of the Alternative Pathway

**COOK Report:** What follows is an ordered list of the robotics programs as well as related grant programs put together and operated by William under the umbrella of his A STEAM Village. Right now these are coming together in a kind of stew pot. Some will fall by the wayside while others are likely to grow in their importance. The goal is to get participants to widen their horizons in terms of what they understand possible for their own futures. The goal is to also have programs that can provide the equivalent of remedial material for those who are interested in STEM careers but so far down test at the appropriate levels to enter into programs that have been designed for these levels. The idea of these is to provide an opportunity to catch up.

William intends to provide appropriately skilled attendees for the national conferences of BDPA and the National Society of Black Engineers (NSBE).

In the meantime these approaches will have to be calibrated to integrate with a Kansas City developed version of the LA encounter and LA e7 architecture curriculum. There are three ongoing components: the first is robotics; the second is architectural design and its attendant systems thinking and the third embraces college careers at the level of the BDPA and block engineers group.

### 1. Grades 1-8 Robotics

**FIRST Robotics -- FIRST Robotics** -- Our 1st thru 8th grade students participate in FIRST Robotics which is a global program founded by Dean Kamen who invented the Segway. FIRST has achieved international and gender diversity, however, when it comes to domestic diversity of participation from the African-American and Hispanic communities there is a lot of work to be done. To be fair to FIRST Robotics, there has to be a willingness by the adults to make sure that students participate and compete in the program. I place an emphasis on the word, "compete", because I have seen far too many times and programs where they feel just getting a NXT robot in the hands of the students is enough. The investment of time to enable the students to compete is not willing to be made thus the domestic diversity challenge cannot be placed solely on FIRST. [www.us-first.org](http://www.us-first.org) aSTEAM Village does devote its own staff time to year round engagement of the students.

## 2. Grades 9-12 robotics Ten80 race cars

**Ten80 Education's Racing engages Our** 9th thru 12th grade students also participate in FIRST Robotics but they also participate in Ten80 Education's Racing, Energy, Rover and Innovation challenges. The students seem to have an affinity for the racing challenge over the robotics program. Both programs are very intensive and challenge the students to not only problem solve, think critically and learn through fast failure, but it also gives them insight and understanding into how to run and market a business. Ten80 is one of only four programs endorsed by Change the Equation as a certified STEM Education program ready to be scaled up on a national level. aSTEAM Village is very proud of the fact that we are a regional hub for Ten80 Education. [www.ten80education.com](http://www.ten80education.com)

## 3. IT skills feeding BDPA (LearnKey)

**BDPA and LearnKey** -- BDPA has a central focus on computer science and I.T. skill development for the youth, entrepreneurship and academic success for the collegiate and career upward mobility for professional. The grand idea is that seeing people of color succeeding in I.T. combined with I.T. professionals mentoring the youth and new entries into the I.T. industry will create pathways for a pipeline of qualified I.T. workforce candidates by exposing the high demand, high paying career opportunities that are available. In order to sustain this pipeline, their needs to be diversity in the executive board rooms of the I.T. companies thus the BDPA mantra, "From the Classroom to the Board Room."

LearnKey is a very valuable tool for entry into the pathway through digital literacy and with courses that enables specialized training and certification prep so that one can take certification exams which will qualify them to enter the workforce in I.T.

## 4. Tours of HNTB

**Tours of HNTB** The tours that we have with HNTB are designed to simply expose the students to the many career options and the inter-dependency of the many departments that makes HNTB run. The students are usually amazed at how HNTB uses game design to build visualizations of a project in order to present and win a bid. They are amazed when they see the model of Invesco Field (Home of the Denver Broncos) and Levi Stadium (Home of the San Francisco 49ers and Super Bowl 50). They are humbled when they get to eat lunch with the directors of the departments and realize that many of their life journeys were similar to their current path, even if it may come from rural America or another

part of the world. There is something magical when you are able to engage in a conversation with successful people and they lower their guards to expose that their life's journey was not easy.

## 5. aSTEAM Village Grade 5 – 8 Robotics and Race Cars

**Robotics and Race Cars** We can move some of our more advanced middle school students up to the 9th - 12 grade race car program because again we want to accelerate their learning. We are not satisfied, nor should they be for that matter, if they are advanced. What is advanced? What is proficient? We want to challenge them continuously until it becomes habit for them to challenge themselves and more importantly, embrace challenges and run towards problems with a mentality that they are going to solve those problems so that they can get paid and make the world a better place.

## 6. SPACE STATION Experiments

The **Student Spaceflight Experiment Program** is an excellent, albeit, very expensive program that encourages student exploration of science, participation in America's space program and community-based learning. It costs \$23,500 per mission to participate and gives the students VIP passes to the launch of the rockets to the International Space Station and the opportunity to present their experiments at the Smithsonian Air and Space Museum on the Fourth of July holiday weekend. The students absolutely loved participating and the team at the National Center for Earth and Space Science Education were totally awesome to work with during the five missions that we participated. The teachers that participated also loved the program as well.

However, the demands of meeting the daily requirements of preparing the students for test or curriculum milestones made this challenging for the teachers and in some cases, the program was relegated to after school with parents stepping in to run the program because the teacher's time and capacity made it impossible for their successful participation. I never understood why the model implemented by one school that sent two of the five chosen experiments was not adopted by all schools which was simply to integrate the program into the school curriculum.

Of course, this was a private school and they have a little more latitude than a public school in what programs they can implement and allow their students to participate. The teachers are given the latitude to teach their class as they choose, just as long as they meet the outcomes of the governing authority. The charter school, Benjamin Banneker Charter Academy of Technology was the lead school for the first two missions and aSTEAM

Village assumed the role of leading the final missions for the Kansas City community. I was the Program Director for all of the Kansas City missions. This means that it was my responsibility to recruit sponsorship and funding from the community, recruit school participation and then orchestrate delivery of the program for all of the schools. SSEP led to my introduction to Rick Usher who helped rally funding for the first mission from the City of Kansas City and the Kauffman Foundation real estate arm. I am still not sure why the education wing of Kauffman didn't embrace this program, underwrite it and make it a high profile education program for the entire Kansas City community. It is my hope that they will consider doing so, especially since the aerospace industry is in its infancy stages and is definitely a high growth industry that does intersect with engineering.

## 7. DigiPen Game Coding and Design Grades 3-8

**DigiPen** is our preferred curriculum for teaching video game design, video game programming and animation. DigiPen is located in Redmond, WA which is home to Microsoft World Headquarters, Boeing and many other tech companies. Princeton Review ranks DigiPen as the number three ranked post-secondary school for game design behind only the University of Utah and USC, the founder of DigiPen, Claude Comair, realized early on that there was a deficit of talent that would be needed for the game design industry. Mr. Comair, founder of Nintendo North America and the Donkey Kong creator has the IVY League school for game design, animations and arts. It is literally a hybrid arts institute and computer science school that touches all levels of innovation and creativity. aSTEAM Village is very proud of this longstanding relationship as a regional hub of DigiPen.

## 8. Encounter KC Grades 8-12 And Junior College

**Encounter Kansas City** is for everyone, people of all ages and walks of life. It is designed to be a welcoming place for the community to connect with each other to conceive ideas and invoke thought. Once you walk into the Encounter space, your degrees have no value and your lack of degrees have no penalty. What is valued is you the person, your thoughts and your ideas.

## 9. University of Missouri Kansas City MetroLab Networks

I cannot speak on the **UMKC KC MetroLab Networks** piece other than I think it is a great idea and concept, especially, if it is diverse and inclusive of the entire community in its design, implementation and completion. The opportunities are there and I just hope that it doesn't get sidetracked by bureaucracy and territorial thinking. Hopefully, one will not have to be a student of the university in order to participate and contribute.

## 10. KCK Junior College --how do they get on Board?

My very limited engagement with **KCKCC is through the drafting of the Cyversity** grant for the Kansas Workforce Commission that is under review. During the meetings they said that they would love to have us come to the campus and discuss the implementation of the Innovation Labs but I have refrained from making that call until after the release of the DOL grant awards or the successful deployment of three Innovation Labs that have machines talking to each other.

## 11 Innovation Labs at 10 to 15 community centers attached to Google Fiber network

The Innovation Labs will consist of Computers, Software, Gigabit Broadband, 3D printers, people from the community and all of the labs must be able to talk to each other through interconnectivity. **COOK Report:** Your ability to get the hardware and software necessary for the slab depends on the successful delivery of the HUD grant you wrote for that purpose in August I think yes? **Wells:** No, we will have Innovation Labs even if we have to make our own 3D printers and continue to use the archaic computers that our students have to use today.

## 12 Starting with 6301 Rockhill Road for design and execution of e7 curriculum

This will be the first lab to be brought online. We will have the entire 4th floor of an office suite owned and leased by the owner, Mr. Abnos.

## 12. HUD Community Connections

There are almost 170 public good entities connected.

## 13 Other HUD programs?

HUD is the funding agent for the state and city. I think that we need to let another person or organization work at the higher levels of engagement to discuss the funding mechanisms and resource allocations between government and the intended destination of the funding. I think everyone would agree this model needs revamping, I believe there is some movement to revamping with push back from the ones who benefit financially from the traditional funding mechanisms.

## 14 NSBE and BDPA meetings in KC in 2017

The NSBE Annual Convention in Kansas City should be a game changer for the mentality of the students and parents in the STEM/STeAM education arena. It should re-establish where the education bar is set for people of color in Kansas City. It should also re-establish where the employment, career, recruitment bar is set for people of color in Kansas City. If we are able to accomplish those two things as outputs of the convention, then the inclusion and economic development for the entire city will accelerate because the higher aspirations, work ethic and interconnected, interdependent engagement of the city, industry, school system and the community will enable Kansas City to not only prosper but also be the guiding light for the rest of the country and the world. That is my hope!

### FUNDING, EXECUTION and OTHER INPUTS AND OUTPUTS

Funding is definitely important, but not the driver! I say that it is not the driver because we have been on this journey for five years with little or no funding. Yet Still We Rise! The aSTEAM Village and the community cannot allow funding to be the determining factor of whether or not the Encounter Kansas City Innovation Lab is sustainable or successful. Why? ***Because the well-being and survival of the community, the growth of the youth of the community is either going to happen or not happen with or without funding. So it is in the best interest of the community, the youth and families to push forward on this journey based on determination and the desire to participate in the 21st Century economy as a producer and not a consumer.***

That said, it is in the best interest of industry, education, the city, state and federal government entities to fund the community and accelerate the growth as opposed to ignore the community and watch it persevere without any support. Why? Because a partnership between all entities and the community spurs economic growth, development and prosperity which then brings other businesses, individuals and conventions to the city which has not only the infrastructure but also the community working as one unit for the common good of the city.

### Conclusion Regarding William's Pathway

When I started working on this with William in the first few days of September, I thought that what we produced would be heavily involved with the ideas for an Encounter Kansas City — ideas that he was picking up from Michael Rendler and Marcela Oliva in Los Angeles. It has turned out to be quite different from what I anticipated.

Like many productive people Michael and Marcella for the past 25 years have been busy “doing” and have managed precious little time for documenting what they have done. I volunteered to assist them but it meant diving into and having to understand a completely new world. I think it also meant somewhat the same thing for William.

As the weeks passed and I tried to develop the best summary understanding I possibly could of what they (Michael and Oliva) had developed during the last 25 years. I saw that another “they” were able to help each other out. In this case the major example was the urban MetroLabs Network projects — an approach that seems tailor-made for Kansas City's rather unique situation and well adopted to the need to train local youth to go out and gather data for city government people working in tandem with researchers at the local university.

I would have preferred to have things tied up in a neat little bundle by October 31. But this was not to be. The first major step in the development of a Los Angeles effort to plant seeds with William in Kansas City will take place on November 10. But William in the last approximately 2 to 3 weeks, has as I now know put a great deal of “wrapping” around the package he is building. One unexpected pleasant surprise for me was that I didn't realize how far the Google Fiber network buildout had developed by means of its making an alliance with the Community Connectivity program at Housing and Urban Development whereby Google is connecting no fewer than 10 different Kansas City Housing Authority sites enabling as many as eight or 900 families to enjoy gigabit connections, almost but not quite, for free.

In the meantime Kansas City has been connecting community centers, churches, schools, libraries, and the like to the Google Fiber network all of which means that there is no reason not to have William build a virtual network for the programs that are summarized earlier in this Chapter 10. The Goal is to link them all together in a powerful mechanism that, thanks to Google and to Rick Usher at Kansas City government, can indeed serve the public good. So thanks to the ability of Rick and William to work constructively together — along with Google's public spirited willingness to assist the public good in the gigabit fiber communities that it has built — hopefully at some point in the future will continue to build — Kansas City does have an opportunity to show the nation what a gigabit infrastructure built as a public good can do for the benefit of all Americans.

## **The Focus of this Issue in the Overall Kansas City Context**

**Editor's Note:** As we were going “to press” on October 30 Rick Usher wrote to the Arch Econ mail list with a criticism that indicates a misunderstanding of what I am trying to do with this issue of the **COOK Report**. My response follows.

**COOK Report:** Rick I guess you were reacting to what I wrote in a draft for the Executive Summary of the current issue I'm trying to publish within roughly 24 hours. Both that draft and what actually will be published focus very much on the efforts of William Wells and on what in my opinion are the extremely positive things that he is doing with the aid in part of Kansas City being the site of the first buildout for Google fiber. As I understand it from reading the contract that is on the city clerk's website organizations that are doing the kinds of things that William is doing are eligible for connection to the Google Fiber network.

But before I go too much further let me also make it clear that my focus is not just William but rather on the organization he has founded - namely aSTEAM Village. His effort is about that organization, about the kids that make it up and the parents that support it.

Meanwhile back to the subject at hand. Once William has his Innovation Centers connected to the network it will considerably leverage what he is able to do with them. But before we fasten on the kinds of criticisms that you are bringing up and make any decisions about aSTEAM Village and William's role in them. let's be very clear: my initial interest in Kansas City came from Isaac Wilder when Isaac and I made a trip to Catalonia to see firsthand what had been possible in that part of Spain when it's citizens got together and decided that it would be up to them to build their own Wi-Fi broadband network. When we had our first look at [guifi.net](http://guifi.net) it had more than 18000 working nodes covering an area the size of the state of NJ in the USA. Today their website shows 32416 working nodes.

Having met Isaac during Occupy Wall Street I had been working with him to document his ideas about building citizen end user controlled wireless networks linked of course to the internet. As far as William goes I had no idea that he even existed until in December 2014 i got a phone call from him asking if we could talk about my portrayal of his KC based broadband wireless network from the late 1990s and early 2000s. By then I had published more than 200 pages overall on user, owned, controlled and operated networks. I had been to KC in June 2014 for an 8 day visit to Isaac with the assistance of the Mutual Musicians organization. My opinions about Kansas city were open and very much on record long before William's December 2014 phone call. By the way it was Michael Limatta who was one of my hosts in 2014. We visited CFGs technology center in Kansas City Kansas which, as I understand it, is typical of the public housing complexes that you and Rachel are connecting to the Google Fiber Network.

Now I asked for feedback from the list on that draft executive summary material on William's plan to, among other things, use Google fiber to enhance the education and employability of Kansas City minority youth. While you have said openly that you certainly support William — as I indeed hope you are doing and will do in the future — it seems to me that what you were doing now is offering me the criticism that this executive summary does not focus on such things as Kansas City's involvement in an international Smart City movement. I first wrote about Smart Cities in the year 2007. The subject at that point

was Cisco's original Smart City effort with San Francisco, Amsterdam, and Seoul. So I am very much familiar with "smart cities" and I am sure that you and Rachel have been reading carefully and closely the thread in this list during the last week on the very serious vulnerabilities found in the Internet of things and understand obviously that the Internet of things is being wrapped very closely into smart city efforts. I'm glad you have an opportunity to read here the discussion of these issues — issues that are extremely serious and that, as far as I can tell, no one has a significant solution to as yet.

You have pointed out smart cities and "digital inclusion" meetings of national groups that are talking about programs that perhaps they might do locally one day. While it is very good to see Kansas City participating in this, the fact is that this participation remains well outside the scope of what I am doing by way of an effort to help William get down in writing what he is doing and - in that process - explain what he is doing to people allied with his aims. As he makes very clear, these aims are the achievement of an education for the youth of the people of color of Kansas City in such a way that they will be most optimally qualified for jobs with Cerner, HNTB, and many other companies of national stature that rely heavily on technology; that are in the Kansas City metropolitan area and yes absolutely will benefit from the presence of the Google Fiber Network.

Consequently, I'm sure you now understand better the narrow focus of my research and writing and what I'm doing to assist William and aSTEAM Village. These are efforts that in past - prior to Google Fiber - have not been extraordinarily successful. I am assuming the goal to be the provision of a good education and good technology education for the minority youth of Kansas City. I think the material in my prior issues has made that clear. But I would like to add that - thanks to the positive factor of your involvement with Google fiber - I also hope you will see how Williams effort is different from prior efforts and deserves every bid of - not just moral support - but also financial support that those driving policy and power in Kansas City can offer.

I would be honored if you would discuss these issues here on this mail list. But the examples that you just raised - I'm sorry - are well outside the scope of what William (and aSTEAM Village) are trying to accomplish with what little bit of assistance I can give them and their effort. Because, as he says, it's not the adults who matter. "It's the kids".

## **NEXT ISSUE**

Right around New Year's weekend will very likely have a Kansas City follow-up and also hopefully have an interview on the problems now faced by the Internet of Things.

# Appendix

**STEAM**  
village

Preparing youth,  
young adults  
and parents for the  
challenges of the fourth  
industrial revolution.

**ANNUAL REPORT  
2015-2016**

**KIDS  
FIRST**

## MESSAGE FROM CHAIRMAN

### OUR MISSION

Inspire students and families to pursue education and career pathways in Science, Technology, Engineering, Arts and Math (STEAM), through community-based project learning and innovative programs.

### OUR VISION

The aSTEAM Village vision is to implement an expanded learning strategy in before/after-school and weekend environments using STEAM curriculum program for family members in Kansas City, Missouri and Kansas City, Kansas. Our model is designed to be easily replicated by communities around the world who we hope will adopt our model and modify it to fit their respective communities.

### FINANCIAL OPERATING STATEMENT

#### 2015-2016 INCOME

Grants & Gifts	\$50,700
Advance	\$13,000
Fundraising	\$5,289
Goods sold	\$24,000
<b>*TOTAL</b>	<b>\$92,289</b>

#### IN KIND REVENUE

**\$41,940**

#### 2015-2016 EXPENSES

Summer camps (2)	\$52,000
Competitions (5)	\$85,000
After School Expanded Learning	\$6,500
Supplies	\$3,000
<b>TOTAL</b>	<b>\$146,500</b>

\*Parents (chaperones) paid their travel and lodging expenses

### BOARD OF DIRECTORS

**William Wells, Jr.** Founder/CEO  
**Chester Thompson** Chairman of Board  
**Penny High** Secretary  
**Joyce M. Wells** Treasurer  
**JoEllen Richardson**  
**James Jenkins**  
**William Mullins**  
**Kordie Marsenburg**

aSTEAM Village is closing a very productive year with many successes in student learning and outstanding results in competitions held across the United States and job placement in major corporations in the Kansas City area. All of these activities are preparing our students and young adults for a future in the 21st century workforce.

Our ultimate goal is to create an aSTEAM Village facility, centrally located in the urban area and easily accessible to public transportation. Our key success indicator will be the adoption and migration of best practices developed in our programs and their integration into the regular school STEAM curriculum resulting in students and adults that are prepared to participate on a level playing field in the 21st century. aSTEAM Village model provides direct and one on one interactions between the learners and teachers and is an influential part of delivering a quality education. Several years ago Daniel Bell wrote the following regarding the postindustrial society.

**“Differential status and differential income are based on technical skills and higher education. Without achievements one cannot fulfill the requirements of the new social division of labor which is a feature of that society. And there are few high places open without those skills.”**

— Daniel Bell

It is important that we realize that entry into the Fourth Industrial Revolution is underway and is a critical step that must be a part of everyday lives for our youth and young adults in this country and particularly in the urban areas. Large numbers of African Americans and Hispanics lack the theoretical knowledge and technical skills required for participation in the New Economy as well as the newly defined Fourth Industrial Revolution... aSTEAM Village model provides direct and face-to-face interaction between the learners and teachers and is an influential part of delivering a quality education.

Another important provision of the aSTEAM curriculum is that it is designed to address this major challenge by providing certificates that recognize skill level at any equivalent school education or equivalent grade levels from K-12 that prepares them for jobs early in their careers. Given the fact that the tech industry is changing at a fast pace and in the process creating new jobs, potential employees with necessary skills are not graduating fast enough to fill the demand. That's why we believe that aSTEAM Village and its model is vital to not only assisting in filling these voids but concurrently contributing to reduce economic inequalities that exist in urban America today.



**Chester Thompson** Chairman of Board

## ABOUT aSTEAM VILLAGE

The founder of aSTEAM Village developed robotic teams at Benjamin Banneker Chartered Academy of Technology (BBCAT) and was influential in assisting St. Peter's Catholic School and Academy Lafayette French Immersion School in starting their robotics programs. Under his leadership the BBCAT robotics teams were invited to three World Festival Expos in St. Louis, MO where they won the "First Class, Inquiring Minds and the Amazing Movement Awards". His robotics teams also won the prestigious Champion's Award, two Gracious Professionalism awards and two Presentation awards before moving into the NSBE FIRST robotics program. In his role as the Robotics director at BBCAT, the school has hosted Community STEAM Day, Train the Teacher Workshops, and Computer Coding workshops. Also, the schools participated in the various competitions throughout the city and participated in the National Center for Earth Space Science Education's Student Spaceflight Experiments Program which successfully sent four student experiments to the International Space Station. The fruits of the student's hard work paid off with student teams receiving invitations to a VIP tour of NASA's Mid-Atlantic Regional Spaceport Facility. Students from Benjamin Banneker Charter Academy of Technology (BBCAT), St. Peter's, Crossroads Academy and Della Lamb Charter School sent experiments and mission patches to the International Space Station and made history by being the first elementary and middle school students in the state of Missouri to participate in America's Space Program.

As the robotic team director at BBCAT he continues to work with the school, his vision and mission for STEAM education was not only for students, but to reach into the community to involve parents, young adults, teens and youth, thus the founding of aSTEAM Village Inc. The curriculum offers fifty four under-represented youth the opportunity and challenge to expand their creative minds.

Our youth in the aSTEAM Village Programs have won several awards by competing in competitions in St. Louis, MO, Wallops, VA, Anaheim, CA, Boston, MA, Miami, FL, Houston, TX and through the Kansas City area. aSTEAM Village curriculum offers our under-represented youth the opportunity and challenge to expand their creative minds through critical thinking, problem solving and conflict resolution.

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### CALENDAR OF EVENTS

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**EXPANDED AFTER SCHOOL & SATURDAY LEARNING PROGRAM**  
September 9, 2016 – June 10, 2017

**FUNDRAISING EVENT**  
December 16, 2016

**NSBE CONVENTION**  
March 29 – April 2, 2017

**SUMMER CAMP**  
July 10 – 29, 2017

**FIRST ROBOTIC COMPETITION**  
TBD

**TEN80 COMPETITION**  
TBD

### CORE VALUES

We are a team – we work to find solutions – we learn together – we honor the spirit of friendly competition – we share our experiences with others – we display gracious professionalism and cooperation in everything we do – we have fun



**"Since I've been at the robotics program I've learned soft skills, teamwork, and just robotics in general. This program teaches you about robots and or cars, but most importantly it teaches you how to speak up and not be afraid of putting your opinion out there. It prepares you for the real world."** – Sydney



**"Robotics is a very fun and educational experience. Some of the things you get to learn are core values, programming, computer coding and how to build remote control cars and robots. My sister and I were chosen to attend West Point Military Academy STEM camp where we were able to discover new things, solve problems, and learn science and engineering work."** – Courtney



**"My years at aSTEAM Village have been challenging and informative. I experienced some rough times, to the point of wanting to quit, but I stayed and it paid off. My Ten80 Team won the 'Raising Star' award at the NSBE convention competition in Boston, MA and received a wild card to compete in the National Competition in Miami, FL."** – Seamus

## WHAT CAN MY DONATION ACHIEVE FOR 2016-2017

- \$5** One student's annual registration cost for the aSTEAM Village NSBE Jr. local chapter membership

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- \$25** One month of a student's annual program fee

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- \$70** One student's software license for LearnKey online learning and certification platform

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- \$100** One student's NSBE Jr. Chapter membership, one month annual program fee, and LearnKey software license.

---

- \$250** One student's full annual program year fee for the entire ten month after-school/Saturday expanded Learning program season

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- \$500** One student's NSBE Jr. Chapter membership, LearnKey software license, annual program year fee, NSBE Annual Convention and Competition registration, and dinner each night of the convention.

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- \$1000** One student's NSBE Jr. Chapter membership, LearnKey software license, annual program year fee, NSBE convention registration and all convention and competition related travel expenses.

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- \$1,500** With a donation of this size your contribution covers all program related expenses for one student including convention and competition travel expenses. In addition to covering costs for one student additional funds assist with program wide needs like Lego parts, race car replacement parts, poster boards, markers etc.

**REMEMBER**

aSTEAM Village is a 501(c)3 not for profit organization. Donations are tax deductible. Ask your employer if your gift can be matched.

**FOR MORE INFORMATION**

**aSTEAM Village**  
 1601 E 18th Street, Suite 119  
 Kansas City, MO 64108

(816) 535-0939

info@asteamvillage.org, www.asteamvillage.org  
 facebook.com/asteamvillage, twitter.com/@asteamvillage



### THANK YOU TO OUR SPONSORS

Cerner — BEU  
 Google Fiber — Blacks in Government  
 Microsoft Store  
 BDPA Full Employment Council — NSBE Jr.  
 DigiPen — Benjamin Banneker  
 Charter Academy of Technology  
 Central Academy of Excellence  
 United Community Services Action Agency  
 Jackson County Auditor Outer Agency  
 ExtraO Travel  
 Friends of aSTEAM  
 Parents



*"I think aSTEAM Village is one of the best organizations that I've been involved in. I've been there about five years and it has evolved over the years. Throughout the years, there is one thing we always kept in our minds 'The use of Gracious Professionalism'." — Tony*

## The following comes from Kansas City's contract with Google.

as long as the sites pay for their connections to Google's fiber network Google is obligated to serve up to 300 sites as designated by the city schools libraries civic and cultural institutions and so on. Rick I sure assistant city manager for Kansas City and single point of contact for the Google fiber contract tells us that so far over 200 of the 300 sites have been connected.

#### **4. Services to be offered by Google**

##### **(a) High speed Internet access**

Google will provide broadband Internet service to end-users. The specifics of the service will be defined as the Project progresses. Google will make commercially reasonable efforts to achieve a service speed of up to 1Gbps.

##### **(b) Pricing for Internet services**

Pricing for Internet services will be defined as the Project progresses.

##### **(c) Customer support**

Google will provide customer support for end-users of the Internet service.

##### **(d) Other services**

Google may offer other, as-yet undetermined services, using the network constructed as part of the Project. It will offer such services in accordance with all applicable permits and laws, as well as the terms of this Agreement.

#### **5. Obligations of City**

In addition to all other obligations mentioned elsewhere in this Agreement, City will have the following obligations:

- (a) Provide an Executive Sponsor for the Project at the most senior level of City. The Executive Sponsor will have the primary responsibility for interaction between Google and the City Council.
- (b) Provide a single point of contact ("SPOC") for Google, which SPOC will be responsible for addressing all issues related to the Project, providing coordination across City departments and serving as a communications and troubleshooting resource for Google. The SPOC will report directly to the Executive Sponsor for all issues related to the Project.
- (c) Create a City team dedicated to the Project and allow Google to place Project employees in City office locations, working side-by-side with the dedicated City team.

## **6. Obligations of Google**

In addition to all other obligations mentioned elsewhere in this Agreement, Google will have the following obligations:

- (a) Work closely with the Executive Sponsor and SPOC of City and relevant City departments with respect to the design and construction of the Project.
- (b) Comply with all requirements of City for permit and use applications.
- (c) Build, operate and maintain the FTTH network, based upon demand by City residents, availability of necessary infrastructure, and appropriate cooperation of Kansas City Power & Light.
- (d) Offer high-speed Internet services to City residents in locations within City via the network built in connection with the Project.
- (e) Manage all coordination with resident community groups for the Project in general, and with neighborhoods, blocks, and residents individually, regarding the Project's logistics, impacts, and schedule.
- (f) Cooperate with City on all public relations and publicity for the Project.
- (g) Provide the services in Section 4(a) to City for up to a total of three hundred (300) locations and other governmental buildings throughout the City, to be identified by City. When such locations are passed by the Project construction, the City or other designated governmental entity may connect the locations to the Project at its expense, and then receive the Section 4(a) services free of charge.