

THE FUTURE IS NOW –
AN ORIENTATION TO THE RELEVANCE OF DIGITAL MEDIA ARTS AND
COMMUNICATIONS

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THE EMERGING CONTEXT OF HUMAN RELATIONS AND POSSIBILITIES

All our children, the children in both advanced and developing societies and cultures, are growing up in a time of infinite new possibilities and, both material and cultural transformation unprecedented in human history. It comes simply as a result of the invention and applications of digital media communications and media technology. Certainly there are cadres of adults who, being responsible for the invention genius of our moment, have a sense of what is happening. But in the main, the overwhelming adult community, that is, people who grew up acculturated to pre digital norms of how things happen, how learning takes place, how work is organized, how social relationships and organization develop and operate, how the economy – making money, banking, investing, managing and doing business occurs in a national and international capitalist framework, the norms of the time it takes to do things and the spaces in which things are normally transacted, all the things that we all take for granted about reality, people who run and work in the world, do not understand that a paradigm shift has taken place among our children who have grown up with computer, wireless, mobile technologies as an ordinary phenomenon. This generation, youth younger than 18, are generally talked about as “digital natives” who assume that they can text, call, tweet, video, animate, play video games, see each other, find out anything, communicate anything instantly, anywhere, to anyone on the internet or with whomever has a similar mobile device with the buffet of capacities now installed in 2010 cell phone and electronic tablet technology.

One doesn't have to go far to relatively easily find out that something momentous is happening all around us that is beautifully described by Thomas Friedman in his published history of the last 20 years of the world's life with regards to digital technology – “The World is Flat”. Friedman bops along, anecdotally documenting the asymptotic growth of wherewithal and the logarithmic development of human interactions resulting from how people harness and imaginatively employ the tools of “information” sharing and, more importantly and critically, “knowledge” sharing. He takes us exuberantly by the hand and chronologically introduces us to entrepreneurs all over the world that are the *mavens* of the transformation and salient examples of businesses like UPS, Hewlett Packard, Wal-Mart, whose fortunes are directly tied to using a few of the possibilities inherent in the paradigm of “Digitalism”. Digitalism is a world in which non tangible, electronic/virtual communications, become the fundamental basis of all value, exchange, wealth, influence, and cultural life. It is a world in which universal digital creation and intercommunication will form the framework of “currency”, productivity, and shared social tenets of our civilization. It will be the basis of a potentially egalitarian and democratic human society heretofore unimagined. Within this context, issues of global sustainability, security, nutrition and health, infrastructure, education, resource development, peaceful and creative human relations will be radically transformed and globally reinvented by the possibilities derived from universal participation of every communicating human being with access to digital tools.

We have launched into the next human epoch of freeing both the “forces of production”, people, and, the “means of production”, tools and resources to the fullest extent of human potential. I do not predict utopia, only an infinite cultural and production interdependence and expansion, a true revolution that is no longer discretionary but will flood in, unavoidably, inexorably, irrevocably, as long as human tool invention and digital technology continues to logarithmically expand. People will use new things to do new things as fast and unpredictably as they can!

The big point is that regardless what we think is happening around us and how the world should work by the standards of selective information access and pre digital technology interrelationships, a change has begun, the tipping point, that will sweep every human being into intimate relationships

with all others through the formation of a single universal language and the ability to instantly and massively communicate. We are at the ground point of constructing a new “Tower of Babel”¹ having addressed the divisive consequences of not being able to practically communicate with each other, across all differences, to exercise the illimitable and insatiable genius of human being.

What is possible in the way of this unimaginable mediated synergy requires only a person’s ability to see and or hear imagery and intentionally respond through any reproduceable signal, not necessarily articulate language, to exercise human will, preferences, needs, effective expression. That is the core of personal power.

We certainly can anticipate where the transformation in visual and audio cues for people with disabilities will lead. It will demand taking advantage of this communication revolution to universally individualize learning and growth by breaking down all information into the most compelling bits and embedding these in software design. The surefire magnet of “image engagement” invites the exploration, the analytical and design thinking and applications that are the benchmark of our smartest human pedagogy to nurture and shape human development that must take place in the individualizing of educational strategy and tools for people who learn, grow and communicate at the extremes of differentness. As Marc Gold did, the poobah of “Task Analysis”, who formally reduced the most complicated operational human endeavors to the tiniest steps of sequential learning that ultimately added up to success and riveted involvement on the part of the most unorthodox folks, we to can devise teaching and learning, through visual and audio design to empower everyone – anyone – to grow and have influence on the world around them. Most importantly, digital technology may well be the panacea for overcoming the social and institutional isolation and exile from mainstream human community for people with special needs. Up to now they have been exploited in our pre digital, human management delivery system resigned to the ignominy of segregation, congregation and public policy driven, out-of-home placement for devalued populations. A staggering public ransom we have been forced to pay in every way.

Coming back to the situation at hand, the problem with this altogether new universal digital expansion, is that grappling with the kind of possibilities that are occurring is, for most non-digital natives, altogether anxiety provoking, painful, threatening, embarrassing, frustrating, and plain hard for those of us. We hold a myriad of mostly unconscious certainties, familiarities, a sense of security, personal confidence and power from human norms that operated with digital tools being experienced simply as “the new thing”. “Digital” development is generally mistakenly experienced as simply lots of new gismos, “innovations” such as high resolution TV, elegant cell phones and communication devices, high-speed Internet access, online banking, websites, eBay shopping and Google. Just more of an interesting way or doing things “normally” that one could ignore, minimize, avoid, or heartily consume/embrace as an “early adopter”. The common wisdom among pre digital era policy and decision makers has been to grudgingly accede to bringing computers into workplaces, classrooms, learning how to use email, playing video games and listening to ‘downloaded’ music, having “smart” appliances and putting up with the kids relentless demand for the latest electronic toy. This has been largely an accommodation to a new set of questionable conveniences or perceived distractions as the case may be. These additions are not seen as accepting a fundamental and thoroughgoing context transformation, rapidly changing every aspect of our lives and propelling our children into a new awareness of instant and continuous access to each other and a limitless world of interest around them. The boggling attraction and scope of public use seems quite independent of the efforts of the contemporary drivers of the innovations, who largely represent altogether new and aspiring commercial markets.

The utter newness of digital technology to mass culture, about 25 years altogether, is the fundamental barrier in what is basic to the tension, the real “digital divide”. Nonetheless, the speed of uptake of digital media communications access is the single largest growing social phenomenon on earth. The

¹ See Op Ed to Sacramento Bee Draft “A Revolution from One Language – Digitalism” Attachment 1

establishment of the Internet which Friedman chronicles seems like molasses when compared with the lightning expansion of My Space, YouTube, Face book, Twitter and the growth of social networking options that literally absorb tens and hundreds of millions of us within months of their invention. What is of strategic note is that virtually no major institutional investment in modernizing our education system, no formal recognition of the implications to 21st Century workforce needs, no acknowledgement of the real reliance on digital technology for all our fundamental economy has filtered to the top echelons of decision makers to acknowledge the altogether new exigencies of life.

Despite the birthing of this technological revolution in California with its entertainment media industry and digital manufacturing Silicon Valley origins, the bulk of economic and workforce development is exploding outside of the United States. Profoundly hungry and poor, steeped in deep seated cultural arts and aesthetics, unfettered by the costs of old communication infrastructure (wires, cables etc), many third world societies and some sharply competing industrial countries are seizing on the opportunity to convert huge sectors of their schools systems and indigenous work forces to the new paradigm. They are building a world class 'knowledge economy' market – India, China, Viet Nam, South Korea, Singapore, Japan, Ireland, France, England – just to name a few leading examples.

Abroad, second and third generation wireless communications bypass the need to dig cable trenches compared to the nominal cost of putting up signal transmission towers and take advantage of the existing investments in space hardware to handle global instantaneous communications. An additional advantage is that arts and design, fundamental to all innovation, are the norm in these heavily traditional societies where our US education system, paradoxically, has all but vanquished access and graduation credit for the arts and media proficiencies in the US! The demonstrable need to wed arts and sciences into hybrid schooling experience is ignored in the US system with only a tiny few examples of such synthesis at the graduate level – Ohio State, Texas A&M, Carnegie Mellon - catastrophic - as they may seem.

The budget crises that prevails in public education translates, in the hands and minds of pre digital leaders, exclusively in focusing investment in science, technology, engineering and mathematics (STEM) while completely marginalizing and eliminating arts and audio visual communication media as the essential complement to economic restoration instead of recognizing the true seed corn of the present and future. Here also is the key parity discrimination that holds back visual and different learners.

Left to the schools to address that challenge and absent state and industry leadership, the majority of our mainstream children are being trapped in an arcane K-12 and post secondary schooling process that will matriculate them functionally illiterate, in the new world culture and economy. There is no 21st Century 'master plan', no urgent policy priority that understands and is willing to respond to the paradigm shift that is commonly grossly apparent.

The fact is becoming clearer that digital media proficiency is the "stem cell" capacity for all academic and career technology learning. Tragically, the United States Department of Labor, which defines all the real job categories in the United States and upon whose national data derives how the education system prioritizes its curriculum and faculty expenditures vis-à-vis job growth needs, has not, until 2010, made Animator a titled job! Thus, all the artists and professionals listed in the credits of *Avatar*, *Up*, *Wall-E*, *Cloudy with a Chance of Meatballs*, *Lord of the Rings*, *Harry Potter*, *300*, *Shrek*... and on and on, for all intents and purposes, are invisible and non-existent in their true roles as digital producers. This situation of officially unaccredited or undefined jobs exists in spades when it comes to counting all the digital media workers in the legal and medical professions, in the food and style industries, architecture and construction, retail sales, non profit service organization sector, telecommunications, in fact, all modern businesses – people and careers that are hidden in the midst of their ordinary industries or contractually sought from outside to produce the visual and audio products essential to today's across the board market and skill building needs.

It takes a little imagination, but having an epiphany is breathtaking in its possibilities, once acknowledged, as to how digital media arts and communication technology must play as the unconditional ground to the quality of life, socialization and contributing lives of people with disabilities.

It is in this framework of seeing and understanding the astounding inter relational and communication changes that we are living in, that the highest priority must be given to examine and plan for what must be a strategic emancipation of learning and contributing, strategies essential for all children including those with disabilities. Heretofore the community of people with intellectual and physical disabilities have generally consigned their (professionally) labeled members to labor within a context of perceived irrelevance, if not burden, to the pre digital economy, and, stereotypically seen as forever dependent on others to mediate their collective access in all spheres of life. The coming into being of "The Flat World" does not herald just another "new" technology applied to our children to add to the litany of 20th Century "solutions" to the problem of being different and stigmatized. Digital media will actually change the entire social-cultural context of interactivity and social networking wherewithal - absolutely changing our elementary day-to-day lives in the mainstream. Today's paradox is that most adults are left with our stodgy accustomed social limitations, experiencing cautious and apprehensive doubtfulness about our ability to master the digital tools that utterly captivates our children.

The question of how to see, assess and befriend this unmapped, chaotic and complicated new reality is truly the order of our times for families, advocates, change agents, and leaders. This is not an exercise in 'reform' of current pedagogy. Unless the big picture of intentional transformation is internalized and we are willing to take responsibility for connecting the many simultaneous steps towards birthing a system wide ideal, we will continue to scramble, be resentful and feel helpless in the cacophony of bureaucratic anarchy and consumer market manipulation. The payoff of confidently accepting this change will clearly be worth the effort as the disability rights movement pursues its historic agenda of promoting human rights and justice on behalf of families fighting all forms of artificially constructed ignominy in order to live proudly, productively and stigma free.

Three simple and strategic goals provide a good start in guiding the advent of 'digitalism':

- *Promote lifelong learners,*
- *Skilled workers and*
- *Engaged citizens.*

Each needs an articulated philosophical foundation and vision, a common sense and practical context or network for achievement and, a dynamic and creative agenda for implementation. How do we understand and explain what we see happening and the best outcomes of this tectonic shift? Who are the first allies and partners to be sought who clearly have a stake in the change? What "authorizing" environment must we forge to provide the guidance, legitimization, and investments of all sorts in the new paradigm? What incentives and motivations must be offered to polarize and harmonize strategic support from key societal sector stakeholders such as state and local government, education, business and community structures able to prevail against the defeatism, opportunism, tokenism, cynicism, and parochialism that would aver facing and leading the change?

Left to its own, the flooding in of digital culture will create the most profound chasm, a true digital divide between those that understand the game is system change and paradigm shift versus those that see the stuff of digitalism as a variation of business-as-usual consumerism and rampant individualism. It will leave our youth generation without a great framework or compelling models to sort out value from dross, meaning from hedonism, empowerment from conformity, focus from distraction, service to the world from alienation, inspiration from emptiness and mindless cruelty, productivity from consumerism.

It is clear from what we already see, the entire structure of pre digital education is bankrupt. Evidence is:

- The entrenchment of a traditional six period school day,

- Regimented and directed classroom training from a programmed teacher who “knows best” aimed at passive learners,
- The irrevocable fracture between academic pathway learning at the expense of career technical pathways of equal and integrated character,
- The shunning of mobile devices as a continuous instrument of quality learning,
- The compartmentalization of “computer sciences and digital media” from full application in every single core curricular subject,
- The minimization of project based learning in deference to rote testing,
- The detachment and ‘sanitization’ of learning from community service and civic engagement,
- Not requiring the global information and knowledge search power using Google and similar resources in all learning and proficiency demonstrations
- The absence of graduation credit for digital media proficiency for college acceptance
- The absence of Academic Pathway certification for any applied arts course
- The lack of a standard teaching credential in new media

This major set of contradictions that must be bridged. This implies new education law and policies, an altogether new kind of 24/7 teaching, structured by a new kind of administration, directed and prioritized by a new kind of policy leadership, supported by a business community open to success dependent on a new kind of local to global market, funding and resources derived from a new set of economic and political values and democracy that embraces utter heterogeneity, harmony, non violence, cooperation, creativity, idealism, and justice. Will this be seen as contrived logic or even ‘subversive’ by those interests that cannot tolerate such a transformation? Certainly that will be part of the strategic conversation that must be anticipated, as Digitalism becomes the dominant paradigm.

To fully take advantage of this needed radical shift, one must be ready to embrace simultaneous and interdependent modalities of learning and social relationships. At the basic level of use, the emerging digital tools carry information and learning. At the next critical level, they create the new context for community living. Thus far, the majority of the emphasis has been to use and evaluate the use of instructional video or software programmed teaching as a tool for training and development. However, this is not what is most powerful or important. It is the social networking and interactivity possible that can be adjusted and made available at the most interesting and simple level that changes the experience for the participant beyond being just a passive receiver. The most difficult conceptual challenge is to constantly examine how to use the unlimited capacity to instantly connect with others, live in an ongoing meaningful conversation where learning mediated by mobile digital tools and knowledge transmission can be woven into visual face-to-face exchanges and real time engagement between the users. It seems obvious that that is what digital natives are perpetually engaged in doing as they text, talk, and generate visual experience to each other integrating a number of Internet tools – the most familiar being *Face book*, *You Tube*, *My Space*, *Twitter*, *Wikipedia*, podcasting and the like. The role of great new paradigm teaching will show people how to expand the quality and possibilities of sharing, discovering, applying information/knowledge, and growing skills, social awareness, cultural expression, civic engagement, community building and values. It is looking for and using digital communication as both subject and object that maximizes the impact and transformation from consumer to citizen user.

Given this emerging set of imperatives and considerations, the question is how people in leadership roles who represent children and youth constituencies, who are the essential beneficiaries of our education and training social institutions, must craft the most ambitious agenda for development and maximize use of digital media arts and communication tools and interrelationships?

Electronically appended here, I have distilled a modular set of the best experience and program reading that capture the current developments for planning and implementing digital media in education, the workforce and community life that must include all children with special needs. There are powerful recommendations within many of these system shaping and challenging documents and references which will reduce the extent of my final recommendations to the most procedural based on my work over the last 15 years to drive and achieve this transformation.