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Learning to be Fast Capitalists on a Flat World

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In an editorial for the *New York Times*, Thomas Friedman chastised the candidates for the 2012 Republican presidential nomination for being "so much fun" and "so irrelevant." They chattered away about same-sex marriage, gun rights, nuclear weapons in Iran and North Korea, and taxes and spending, when Friedman wished they would concentrate on "the world in which we're living and how we adapt to it." Information and communication technology (ICT) has flattened Friedman's world, providing faster and cheaper tools with which anyone anywhere can innovate, collaborate, and create. The fittest of these adaptations, he reported, integrate more and more empowered "anyones" into ecosystems, which act like petri dishes for imagining, designing and manufacturing products that "make people's lives more healthy, educated, entertained, productive, and comfortable." The politicians, therefore, should explain how to develop "strategic bandwidth advantage" for American "smart cities" that can win the twenty-first century. To us, Friedman's twenty-first century world we live in looks very much like that of the eighteenth, nineteenth, and twentieth centuries—filled with false consciousness, reification, and disenchantment.

Friedman provided a glimpse of his 21st century. He criticized the current American agenda to democratize the use of the internet in under- and un-served rural areas, arguing that, instead, we should provide "ultra high speed bandwidth to the top 5 percent in university towns, who invent the future." In those smart cities, abundant bandwidth would meet abundant human intellectual capital, and "Big Data" would be mined and analyzed like minerals to discover and claim new commodities and services to be manufactured and reproduced anywhere. Other nations are ahead of us, Friedman warned, and this is America's only chance to "maintain a middle class." His questions for presidential candidates and all others, then, were/are "how do we get the best bandwidth to the smartest communities?" and "how do we educate more workers to do these jobs?"

It's clear what Friedman means by educate, workers, and jobs. He recognizes that the smart cities around universities must have "an educated populace" with "abundant human intellectual capital," who will "engage in high-performance knowledge exchanges" using "intelligent objects" to mine, analyze, and discover. This, he acknowledges, accounts for 5 percent of American workers. The remaining 95 percent must adapt to the flat world by learning



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to accommodate flows of resources into smart cities and to support the distribution of the innovations that flood beyond their borders. In order to attain and maintain middle class status, the 95 percent must acquire a certain type of knowledge and new dispositions not readily apparent in current American schools. To broker this change, Friedman seeks to harness the talents and interests of ICT business leaders, federal and state officials, and educational institutions. Although not mentioned in Friedman's editorial, the Partnership for 21st Century Skills (2011) is prepared to supply the necessary curriculum and pedagogy to answer Friedman's questions about American schooling.

In this article, we challenge Friedman's normalization of his world we live in, his ICT determinism, and his abandonment of the democratic project of equality by providing an analysis of the organization, mission, and articulation of the Partnership for 21st Century Skills' (P21) framework, toolkit, and skill maps. Formed in 2002 with the support of the federal government, teacher unions, and ICT firms, P21 works to change public school curriculum and pedagogy to ensure that graduates will be prepared to create and fill the jobs necessary to return the US to its leading position among competing nations in the "global innovation economy." To accomplish this task, P21 seeks to infuse the 3Rs (state and common core standards for academic subjects) with the 4Cs (critical thinking, communication, creativity, and collaboration). P21 promotes the Cs as crucial ingredients in order to prepare the 95 percent to feed and care for the 5 percent housed in smart cities. In our reading of P21, we identify three additional Cs hidden within its documents and curricular maps: capitalism, contradictions, and commodification. Through our analyses, we would like to add an additional R—resistance—to the 21st century curriculum.

P21 Framework

P21 (2011) intends to serve as a catalyst for schools to adopt new skills and knowledge sets that prepare American students to compete and win in a global competitive economy. Working from a Friedman-like narrative about the world in which we live, P21 paints a future in which the rules of employment have changed from relatively secure jobs with gradual demands on workers to acquire new skills to temporal positions within rapidly shifting businesses, which require individuals to continuously update knowledge and skills in order to remain viable employees in highly competitive global markets. Currently, American schools are preparing students for twentieth-century employment, and the last 30 years of school reforms have done little to reorient school curricula or pedagogy in order to help students acquire the skills needed to adapt to changing employment environments. P21 argues for "collaborative partnerships among education, business community, and government leaders" to push schools in the right direction.

P21 began with the ear of the Department of Education, the National Education Association and seven ICT companies. Ken Kay became president, and Diny Golder was a special advisor to the group. Kay, a lawyer, served as a legislative assistant to Senator Max Baucus and Representative Ed Koch before founding Computer Systems Policy Project to lobby state and federal legislators for ICT firms. Often funded by the Gates Foundation, Kay's previous groups—Ed Leader21, e-Luminate Group, and CEO forum—produced Forum on Education and Technology and STaR Chart, a guide to ICT hardware and software for every public school. Golder is the executive director for JES & Co., a software design and development company aiding ICT companies marketing in schools and universities. The original P21's power to push its agenda can be measured in its current membership and influence. Today, 36 companies (from Adobe to Walt Disney), 16 states (AZ to WI), and most professional teacher organizations

(English to Science) work together to encourage and direct the reorganization of school curricula and pedagogy toward the facilitation of innovation through information and communications technology. P21 claims responsibility for Senate Bill 1483 in which Senators Rockefeller, Snowe and Kerry called for federal matching funds for states and schools which implement a 21st century curriculum (expressed in P21 language). Kay participated in the development of the Republican Party platform for 2012 elections.

The P21 project is based on its Framework for 21st Century Learning, a design to augment basic student outcomes and school support systems. Core subject (Arts, English, Mathematics, Science, Social Studies, and World Languages) teachers are to take up 21st century themes in order to become more relevant (global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; and environmental literacy—listed in that order). In addition, teachers are to introduce three additional skill sets for students to master – life and career skills; learning and innovation skills (the 4Cs); and information, media and technology skills. To facilitate this work, P21 offers commentaries and suggestions on traditional school support systems (standards and assessments, curriculum and instruction, professional development and learning environments). Each layer of the Framework is described concisely, elaborated through examples, and linked to other agencies that pursue similar changes. For example, global awareness is tied to the University of North Carolina's Center for International Understanding and six other like-minded agencies. The P21 rationale and framework are repackaged to address multiple audiences (educators, policymakers, and the public).

Behind the P21 Framework lies a critique of thirty years of school reform—from the A Nation At Risk report in 1983 to the current iteration of the Elementary and Secondary Education Act, No Child Left Behind. According to P21, those reforms focused only on raising academic standards, formal measurement of student proficiency, and closing achievement gaps among social groups. They ignored the real issue—the mismatch between the school outcomes and the needs of business. Through multiple iterations across three decades, school reformers invited, compelled, and then required teachers to make curricular, instructional, and assessment changes. Yet, the outcomes yielded poor results. Even proficient students would master content that would not prepare them for the skill demands of the global innovation economy. Higher curriculum standards and frequent testing were insufficient and wrong. While the academic standards should be rigorous, P21 argued, course content must include more critical thinking, communication, collaboration, and creativity using ICT tools. Paper and pencil testing of this content is inappropriate. Rather, students should perform their learning through multiple forms of authentic production.

Advocates for strong academic standards and content learning objected loudly to P21's call for generic skill teaching and performative assessments (see commoncore.org/p21.php). E. D. Hirsch argued that P21 advocated "an ineffectual use of school time" and "a fragmented approach with uncertain cognitive goals," because students' group projects would take extended periods of time while only scratching the surface of academic subject matter. Psychologist Daniel Willingham charged that P21 claims for changes in curriculum and pedagogy are not based on research evidence and asked P21 to "recognize that you are moving forward on the basis of theory, not on a proven method, and that students are thus guinea pigs in your experiment." Diane Ravitch reported that P21 is the latest version of 100 years of attempts to make education relevant: "There is nothing new in the proposals of the 21st century skills movement." The Dewey School at the turn of the nineteenth century, the Project Method in the

1920s, the Eight Year Study in the '30s, the life adjustment movement of the '50s, the deschooling movement of the '60s, and outcome-based education in the 1980s all sought life skills curriculum, critical everyday thinking, and creativity by challenging traditional academic subjects and measurement.

Such criticisms miss the point that P21 provides an exemplar of new ground rules for public schooling within the United States. First, P21 presents a hybrid model for public planning in which business provides explicit and transparent leadership for determining the ends and means of education. Second, P21 seeks market solutions to curriculum and instruction needs, drawing almost exclusively from the inventories of Partnership members. Third within this mix, school learning becomes value-added capital and students become commodities. P21 advances augmented curricular content and skills solely for the purpose of enhancing the eventual exchange value embedded in the commodities that the 21st century skilled labor will produce. P21's idea of student motivation is to accumulate these skills in order to increase their eventual rate of exchange in anticipated labor markets. The entire P21 project is designed solely to create a false consciousness among students/workers in order to advance the United States economic brand, promising each participating student (and the nation in aggregate) freedom, agency, and economic power. As P21's toolkit and maps reveal, these promises won't be kept.

P21 Common Core Toolkit

In response to criticism of lack of curricular depth, P21 strengthened collaborations with academic professional organizations to produce a toolkit for aligning P21 skills with Common Core Standards for English Language Arts and Mathematics. Within this document, P21 demonstrates how states, districts, schools and teachers could "honor the fusion of the 3Rs and 4Cs" in order not to repeat the limitations of past school reforms. P21's strategic alliance increases its appearances of scientific and governmental authority—anchored in professional academic organizations and the Obama Administration's efforts to broker national curricular standards through the National Governors Association and Council of Chief State School Officers. Although intended to begin the process of translating the rationale, framework, and skills for school officials, principals, and teachers, the toolkit demonstrates some of the limits of the world in which we're living for the 95 percent who are trained to service the 5 percent who will invent their future.

The toolkit is a 44-page, full color document to identify key points of compatibility between the P21 Framework and the Common Core State Standards. The Obama Administration sponsored the creation of the CCSS through its Race to the Top initiative to change No Child Left Behind regulations. In an effort to avoid the debacles of attempts by Presidents Bush and Clinton to produce national academic standards in the 1990s, the Obama Administration sponsored a competition among states to win a share of \$4 billion earmarked for public school reform. Race To The Top applicants would adopt national core standards, establish teacher evaluation based on test scores, as well as meet other criteria. As Clinton had before him, President Obama charged the National Governors Association to oversee the creation of common core standards in English language arts and mathematics. The project was completed in 2010 and has been adopted by 40 states. P21's effort to align with CCSS puts a particular spin on practices and purposes of reading and writing across media.

P21 refers to literacy frequently in trying to find parallels between CCSS and the Framework. The 21st century themes include four types of literacy:financial, civic, health, and

environmental. Communication and Collaboration includes a subsection listing skills to communicate clearly—oral, written and nonverbal—across media. Information, media and technology skills are divided into information literacy, media literacy, and ICT literacy. Yet, P21 does not define "literacy" anywhere in the toolkit or on its website. Rather, P21 lets the short list of expected student outcomes imply the meaning of literacy while claiming its version of literacy as intellectually transformative (Goody, 1986). Toolkit users must infer P21's definition of literacy from the verbs and adverbs used in these lists.

P21 uses an appendix to restate its framework within the Common Core Toolkit. The language within these nine pages demonstrates the negotiation concerning how categories should be labeled and student outcomes should be communicated. Because P21 highlights clear communication as a fundamental 21st century skill, the wording in the appendix offers their best representation of their project. We find it enlightening, then, that P21 is inconsistent with tense among the verbs chosen to represent literacy. Three of the representations of literacy in the 21st century theme use a progressive tense, suggesting ongoing financial, civic, and health textual activity. P21 offers the infinitive verb forms in remaining explanations of literacy, implying a skill that can be mastered. For example, students are expected to be developing financial literacy continuously—"knowing how to make appropriate personal economic choices"—but to perform a completed skill in environmental literacy—"demonstrate knowledge and understanding of society's impact on the natural world." In their literacy outcomes, P21 employs 11 progressive verbs, inviting the possibilities of action and growth, and 22 infinitive verbs, promoting mastery once and for all—what Street (1985) refers to as an autonomous cognitive skill.

P21's choice of basic verbs (without tense markers) provides insight into their definition of literacy as well. In the same list of student outcomes called literacy, P21 offers an array of verbs, avoiding repetition that often mars other frameworks for school curriculum. Verbs such as "obtain," "access," and "manage" imply a certain level of intellectual engagement that P21 values highly, offering them in 24 of the 30 literacy outcome descriptors. In information literacy, students will "manage the flow of information from a wide variety of sources." In the other six descriptors, P21 selects verbs conveying a deeper intellectual involvement—"interpret," "investigate," and "evaluate," as in "Evaluate information critically and competently." Although P21 claims its skills "promote understanding of academic content at much higher levels," they present the more mundane aspects of literacy four times more often than they tackle literacy's transformative possibilities.

Finally, P21 qualifies their verb choices with adverbs. "Knowing how" to make financial choices is directed toward "appropriate" ones. All communicative literacy is to be accomplished "effectively." Students are to "access information efficiently;" use information "accurately," and employ digital technologies "appropriately." In each list for information, media and technological literacy, students are to "apply a fundamental understanding of the ethical/legal issues surrounding access and use of information are to be done "effectively" and "competently." Only twice do P21 choices for adverbs expand the actions. Students are to "evaluate information critically" as well as "competently" and to use information "creatively" and "accurately." In both cases, the expansion is tempered with restraint.

According to P21, literacy is primarily a means for students to learn to adapt to Friedman's world in which we're living. Where the P21 framework is deployed, students will master the skills to obtain, access, and manage information accurately and efficiently with ICT

tools in order to communicate to others effectively. At the same time, students will "understand" the current manifestation of globalization and remain actively attentive only about how to monitor themselves within rapid changes to economies, governments, and healthcare. P21 literacy fulfills Friedman's desire to have a population of individuals who can accept things as they are as the new normal, work cooperatively to maintain those things, and bring him- or herself into correspondence with those things when they change. At best, this literacy has a functional agency that enables students to display social competence in a future beyond their comprehension and control (Gee, Hull, & Lankshear, 1995). P21 literacy is a clear contradiction of the promise to deliver freedom, agency, and economic power. It cannot be the literacy for the 5 percent who will invent the future from America's smart cities, but only the literacy of the 95 percent.

With their insistence on individuals' adaptation to the world in which we're living, Friedman and P21 neglect the imaginative potential of literacy in which literate citizens ask, "Why is the world this way?" and "Why should we adapt?" And through that neglect, they limit the possible roles that literacy might take in human agency. Literacy as social competence can enable us to participate in the flows of daily life and to contribute to networks of meaning and social relationships that sustain the flows. But, it cannot place those flows and networks within historical contexts across time and place. It does not help us to see that Friedman and P21 treat the current configuration of the economic world as a natural fact without human origins, human maintenance, or human values. It will not permit us to trace the unequal distribution of human consequences beyond our individual responsibilities. To make those moves, 21st century students need literacies with sociological imagination to expand the notions of text, recognize the pedagogical intentions behind those texts, and identify how those intentions position us politically (Shannon, 2011). Friedman's smart cities and P21's project seek to teach us what we should know, who we should be, and what we should value in order to adapt to his flat world.

The new normal of Friedman and P21 literacy seems quite close to the old normal for students: they are to read, write, and live with the functional agency of social competence but not the democratic agency of sociological imagination. Students are to perform that norm because they don't know enough to participate in the invention of the future. For students to step outside those norms is to choose individual ruin and to drag their community and nation to a lower status within the competitions of the global innovation economy. In the twenty-first century, what the 95 percent needs are literacies that will enable us to decide whether or not we want to accept those positions. They/We need the agency that lies in "imagining not what is, but what might be" (Davies, 2000, 67). But, P21 tucks their form of literacy within the folds between traditional academic content and 21st century ICT tools.

21st Century Skills Maps

In order to provide concrete examples of how 21^{st} century skills could be integrated into core subjects, P21 worked with professional organizations to produce curriculum maps for ICT literacy in English (NCTE), geography (NCGE), mathematics (NCTM), science (NSTA), and social studies (NCSS). The maps are "the result of hundreds of hours of research, development and feedback from educators and business leaders across the nation." The maps begin with a cover sheet that explains the core subject partner and describes the simple equation on which the maps are based. A learning skill + 21^{st} century tool = ICT Literacy. All the maps follow the same sequence of skills: information and media literacy, communication, critical and systems thinking, problem solving, creativity and intellectual curiosity, interpersonal collaboration, self-direction,

accountability and adaptability, and social responsibility. A student outcome is selected for each skill category and then an array of 21st century tools are organized according to grade levels (fourth, eighth, and twelfth). Below each array, several samples of student outcomes for that skill are described briefly. For example,

We chose to examine the geography 21st Century Skills map because of its interdisciplinary approach to the world in which we're living, its embrace of ICT tools, and its commitment to authentic social issues that challenge citizens. The National Council for Geographic Education and P21 present three lenses for students to study "the Earth in terms of its natural and human characteristics": scholarship, stewardship, and citizenship.

Scholarship

Scholarship reflects geography's continued quest for knowledge about Earth and its systems using the most appropriate technologies. Digital information and virtual representations of Earth and its systems are commonly applied in geographic scholarship. (Partnership for 21st Century Skills, 2009, p. 2)

P21 constructs geographic scholarship as the application of smart tools to the "Earth and its systems" in order to uncover knowledge—patterns that can be observed within or calculated from spatial data generated through a combination of remote sensing and *in situ* geospatial technologies. By adopting this approach, P21 promotes an ontology that instructs students and teachers to view the world as a series of objects that we "inscribe" with attributes measured at a given technological determination (Latour, 1988). We map (or draw - *graphy*) the Earth (*geo*) through the enumeration of the locations of these objects and their attributes relative to one another (Cox *forthcoming*). These maps, then, become useful knowledge through the observation and interpretation of the spatial patterns of object attributes (Yapa, 1991; 1992). These views of scholarship, knowledge, and ontology limit what students and teachers can "know" about the Earth, directing them toward social competence and away from imagination.

P21's ontology is reflected throughout the geography map¹. We examine the 12th grade example in order to demonstrate our concerns.

Productivity & Accountability, Sets and meets high standard and goals for delivering quality work on time

Example: Students gather, map, and analyze data from police records, e.g., crime, accident, or graffiti, and overlay other variables to detect and interpret any spatial and temporal patterns, and share results with the community at a local meeting. Students must geocode the addresses of the police records to the correct location, and reflect on the quality and completeness of the data received from the police department. They make recommendations as to how the crime or accident analyzes could be mitigated, and how the geographic perspective aids in the understanding the phenomenon. (Partnership for 21st Century Skills, 2009, p. 18).

In this example, students are tasked with counting the prevalence and mapping the locations of "crime[s], accident[s], and graffiti." Towards this end, students must objectify these

¹ For example, 8th Grade example 1 (Pg 7), 4th grade example 1 (15), and 12th grade example 2 (Pg 18).

occurrences, transforming them into discrete data points with inscribable attributes. These data points are then mapped and evaluated relative to one another and the contexts in which they occur, developing a normalized narrative that describes the selected occurrence in the defined region. By doing this, however, students make several important ontological assumptions that structure their rationalities towards reifying existing ideological power structures (Crampton, 2003). They are forced to see deviant behavior as a series of isolated and subjectified events rather than as the result of socio-economic processes (Young, 1999). This leads to an individualization of deviance where deviant bodies become the targets in need for reform (Foucault, 1975) rather than one of many factors in networks designed to produce both sanity and madness (Foucault, 1967), productivity and waste (Bauman, 2004), or art and pollution (Ferrell & Websdale, 1999).

Students are asked to 'scale' processes in that they engage in the practice of fixing deviance to particular locations, and then, drawing boundaries around those spaces to 'locate' the place of deviance (Swyngedouw, 1997; Yapa 1991, 1992). This approach to place has at least two important side effects. It denies the possibility for place to be something that is open and relational (Massey, 2005) that emerges from a dense nexus of multi-scalar or "glocal" (Swyngedouw, 1997) processes that touch down in particular locations through the people that inhabit them. In this way, much of the complexity of individuals and social networks is made irrational. Through adopting governmental territorial designations—police jurisdictions—students reify state territorial designations and run the risk of falling into the "territorial trap" (Agnew, 1994) of naturalizing state territorial boundaries as functional regions beyond the most basic of governmental functions (Reid-Henry, 2010).

Although students are asked to "reflect on the quality and completeness of the data," this directive offers little towards a critical understanding of the material because it poses only "ontic" questions about the possibility for multiple interpretations of a given mode of "being"— ontology (Crampton, 2003). Rather than adopting an open notion of creativity that asks students to imagine and engage new methods of thinking (epistemology) and being (ontology) and how these might lead to different rationalities, P21 offers "creativity" and "innovation" as closed around their productive ends. In this way, the P21's geographic scholarship becomes "policing" (Foucault as explained by Ranciere, 1999) students towards the development of productive habits that will allow them to perform services of laying the groundwork for the "big breakthroughs" (Friedman, 2012) of the 5 percent who accelerate the accumulative process.

Stewardship

Stewardship reflects the concerns for the positive relationship between people and the environment through sustainable interactions. Responding to challenges of global changes in climate, population changes, natural resource availability, and land use are within the realm of stewardship. (Partnership for 21st Century Skills, 2009, p. 2)

P21's stewardship teaches students to develop "positive" and "sustainable" relationships with "the environment" as they learn to adapt to changes "in climate...and land use." Students are to become good stewards, performing responsible actions upon the environment. In this way, P21 encourages students and teachers to use dichotomous lenses of the "people and the environment" wherein human and environmental spheres appear disentangled from one another, forcing a dualist mechanistic understanding of earth systems. Through these lenses, human and

"environmental" systems function as objectively distinct entities that interface, but remain separate (Castree & McMillin, 2001) and non-human systems are fixed, non-agentic "machines" that follow predictable patterns that are ripe for manipulation. From this perspective, sustainability becomes the adaptation of human behavior and technology to lessen its impacts on the functioning of non-human systems, enabling their energy to be harvested to further productive human ends (Norgaard, 1988).

While this approach to stewardship permeates P21's geography curriculum map^2 , we examine the 8th grade example in some depth.

Social & Cross-Cultural Skills: bridges cultural differences and uses differing perspectives to increase innovation and quality of work.

Students write a dialogue between different people who use water resources in a region, including a farmer/rancher, a manufacturer, a parent concerned about pesticide runoff, and an owner of 20 car washes in the region...what common themes could bring these groups together to form a community water board (Partnership for 21st Century Skills, 2009, p. 16)?

In this example, students are to represent different economic interests within a watershed, to consider how these interests compete with one another and to propose a legislative body to regulate community water usage. Water is taken as an object—a resource—that can be extracted from "nature" for different productive uses (e.g., farming, manufacturing, health, and service). The lesson challenges students to develop the dispositions of a good steward of "their" resources, adapting human behavior and technology to match "environmental" supply. By adopting this approach to water policy, however, P21 undermines its goal of sustainability.

First, the "environment"—water—is positioned as a separate system of attributes to be repurposed towards human ends. No mention is made of water as co-evolving systems that intricately intertwine the human and non-human (Winder, McIntosh, & Jeffrey, 2006). In this way, the non-human becomes an object to be managed and adapted rather than a partner with interests to be included within debate (Latour, 2004). Note that water demands of non-humans are completely ignored in this example.

Second, but related, mechanistic understandings of non-human systems effectively freeze them in time, ignoring the agency within non-human systems in response to human systems (Rammel & van der Bergh, 2003; Latour, 2004). Consider two examples. Eutrophication of waterways is the reaction of stream ecosystems to the loading of organo-phosphates (fertilizer) in which bacteria take advantage of new food sources and oxygen or photo-reliant species shrink in population due to bacterial consumption of oxygen and absorption of photons. Crows are masters of adapting to the urban environment and have found ways to thrive through taking advantage of the waste energy of cities.

P21's dualistic mechanical approach to stewardship prepares students to respond or adapt to the co-evolution of systems, disciplining human behavior to fit within "environmental" parameters. This positions students to balance those productive uses of "the environment" with

² For example: 12th grade example 2 (Pg 28), 4th grade example 1 (Pg 22), and 8th grade example 2 (Pg 16).

which they are faced and to be ready to respond to the "challenges" which those uses produce. P21 is training students to innovate adaptations to global climate change that offer more towards the accumulative process than pre-emptive actions (Klein 2007). P21 geographic stewardship does not foster students imagining themselves as agents in the co-evolutionary process. Any model of "sustainability" that has the potential to be effective has to be able to grapple with change brought on by the co-evolution and interplay between human and non-human systems (Rammel & van der Bergh, 2003).

Citizenship

Citizenship reflects equipping every person with the necessary 21st century skills and access to information that will enable them to become responsible and effective in their active roles as citizens. (Partnership for 21st Century Skills, 2009, p. 2)

For P21, citizens gather information that enables them to form political positions on community matters and to advocate those positions to people with higher authority. Citizenship is "effective" when it is targeted to the correct bureaucracy and is "responsible" in that it enables voices to be heard. In this way, P21 presents political life to students as adapting to "the world in which we're living" with solidified political institutions and practices. Democracy, then, exists external to and above students—a practice in which they can participate, but which they cannot shape fundamentally (Ranciere, 1999; 2010). Political power is held institutionally and is to be exercised upon rather than among citizens (Ettlinger, 2010). The role of the P21 teacher is to enlist her students within this type of democratic practice.

This view of citizenship is reflected throughout the P21 geography map.³ We selected a 4th grade example for analysis.

Leadership and Responsibility: Acts responsibly with the interests of the larger community in mind.

Students propose and discuss specific actions that can help alleviate an environmental problem or relevant community issue...They conduct research as to how a citizen proposal to the city council needs to be formatted, and use that format to create their recommendations... (Partnership for 21^{st} Century Skills, 2009, p. 21)

In this example, students identify a community issue, and then develop a proposal for their city council, inviting local politicians to act. Through this activity, P21 positions the council as the arbitrators of public interest, making it the seat of power to foster healthy living among community members (Foucault, 1984; 2008). In this conceptualization of citizenship, citizens are powerless because they defer to the State's decision on community health, and they assume the State will protect their collective interests. Constructing citizenship in this way is dangerous in at least two ways: P21 presents the political process as navigating a world that "is" rather than one in the process of "becoming." Within a system that "is," power structures are solidified and roles are assigned within already made structures (Ranciere, 1999; 2010). P21 robs individuals of their

³ For example: 4th grade example 1 (Pg 21), 12th grade example 1 (Pg 16), 8th grade example 2 (Pg 22).

agency to interpret and shape systems in which they take part. However, by imagining the political as a process of "becoming," power structures are seen as social constructs that must be re-produced through the performance of roles. Becoming citizens have the power potentially to change their performance and, therefore, interrupt the reproduction of the system—offering new possibilities of "becoming" (Ettlinger, 2010; Ranciere, 1999; 2010).

Applying the idea of "becoming" to democracy, P21 asks students to accept their inscribed positions as citizens, reaffirming the legitimacy of the system through petitioning and voting, rather than imagining that "political rule should, in some sense, be in the hands of ordinary people" (Barnett & Low, 2004). Becoming citizens could mean that ordinary people are involved in the process of political decision-making. Understanding democracy in this way could compel students to push their advocacy beyond a city council, engaging other actors within their communities—individuals, community groups, businesses—enabling them to recognize the multiplicity of routes through which power circulates in modern network societies (Hardt & Negri, 2000).

P21 citizenship is a process of developing competence in one's role within a system that "is." Toward that end, P21 seeks to structure student rationality in order to reproduce the logic and practices of contemporary US principles of democracy, which Ranciere (1999) explains are those of ancient Greece where the role of democratic government was to hide wealth's domination of the *polis* behind an illusion of "full citizen" participation. As the P21 example demonstrates, this domination need not use brute coercion. Rather, it can be furthered in a school system that produces the "effective" social reproduction of competent citizenship among the 95 percent—complete with dispositions to defer to the innovative 5 percent in "responsible," productive ways (Foucault, 1984; 2008).

Fast and Flat

P21 is prepared to answer Friedman's question for Presidential candidates and all Americans: "How do we educate more workers to do these jobs?" Their answer is to provide a curriculum that normalizes the "is" of "the world in which we're living" through a deterministic view of the possibilities of ICT technology and the abandonment of the democratic project of equality (and justice). The expected outcome of that curriculum is adaptation by the 95 percent to contribute small data and resources that will flow to the 5 percent, who will craft the future from these data in order to sell it back as innovation in various forms of commodities, services and rules. The assessment of this outcome is located in the literacy articulated in the 21st century themes: each individual polices him- or herself continuously in order to "make appropriate personal economic choices," defer power to authority, and understand "preventive physical and mental health measures, including proper diet, nutrition, exercise, risk avoidance, and stress reduction." The goal of it all is to increase the speed of wealth accumulation through current iterations of a market-based world in which we are living.

The invitation to adapt to Friedman's world through P21's framework is the attraction of open access/participation and the peril of noncompliance. Friedman promises a flat world, and P21 offers freedom, agency, and economic power. Yet, Friedman contradicts himself almost immediately by promoting a lumpy world in which the 95 percent pile the resources upon the smart cities through their prescribed participation, and P21 limits critical thinking, community, creativity and collaboration to the commodification of human and non-human systems. The fact that corporate media, the "is" governments, and think tanks constantly reiterate these promises

and neglect the contradictions leads eventually to a false consciousness among members of the 95 percent concerning the consequences of acceptance and adaptation. Behind that "pitch" is the threat that any alternative to the reified rationality of the market will bring the disaster of falling—from the middle class for individuals and from the top of the global innovation economy for the nation. Little mention is made that inequities in the distribution of wealth are again approaching the distorted proportions that existed prior to the invention of the middle classes in the twentieth century, when workers' imaginations matched their willingness to resist false promises and perils within capitalism's rhetoric.

Although wrapped in new images and words about power and possibility, Friedman's world in which we are living and the P21 route toward adaptation dull our imaginations and undercut our willingness to resist. The promises are contradicted by the realities; our lives and world become simply "data;" and our agencies are limited to serving those who know enough to invent our futures for us. And despite Friedman's and P21's rhetoric that change comes so rapidly now that we can't keep up, they expect the 95 percent to adapt to what "is" instead of imagining the future as open, co-evolutionary, and becoming.

References

- Agnew, J. (1994). The territorial trap: The geographical assumptions of international relations theory. *Review of International Political Economy*, 1(1), 53-80.
- Barnett, C., & Low, M. (2004). Spaces of democracy: Geographical perspectives on citizenship, participation and representation. Thousand Oaks, CA: Sage.
- Bauman, Z. (2004). Wasted lives: Modernity and its outcasts. Malden, MA: Polity Press.
- Castree, N., & MacMillin, T. (2001). Dissolving dualisms: Actor-networks and the reimagination of nature. In N. Castree, & B. Braun, *Social nature: Theory, practice, and politics* (pp., 208-224). Malden, MA: Blackwell Publishers.
- Cox, K. R. (2014). *Making space for human geography in the social sciences*. New York: Wiley and Son.
- Crampton, J. (2003). *The political mapping of cyberspace*. Chicago: University of Chicago Press.
- Davies, B. (2000). The body of writing: 1990-1999. Lanham, MD: Alta Mira.
- Ettlinger, N. (2010). Governmentality as epistemology. *Annals of the Association of American Geographers*, *101*(3), 537-560.
- Ferrell, J., & Websdale, N. (1999). *Making trouble: Cultural constructions of crime, deviance, and control.* New Brunswick, NJ: Aldine Transaction.
- Foucault, M. (2008). Chapters 2, 3, 5, 6. In M. Senellart, & G. Burchell, *The birth of biopolitics: lectures at the College de France 1978-1979* (pp. 27-157). New York: Palgrave.
- Foucault, M. (1975). Discipline and punish. Paris: Editions Gallimard.
- Foucault, M. (1967). Madness and civilization. New York: Pantheon.
- Friedman, T. (January 3, 2012). So much fun; so irrelevant [Editorial]. *The New York Times*, A13.

- Gee, J., Hull, G., & Lankshear, C. (1996). *The new work order: Behind the language of new capitalism*. Boulder, CO: Westview Press.
- Goody, J. (1986). *The logic of writing and the organization of society*. New York: Cambridge University Press.
- Hardt, M., & Negri, A. (2001). Empire. Cambridge: Harvard University Press.
- Klein, N. (2007). *The shock doctrine: The rise of disaster capitalism*. New York City: Metropolitan Books.
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Cambridge: Harvard University Press.
- Latour, B. (1988). *Science in action: How to follow scientists and engineers through society*. Cambridge: Harvard University Press.
- Massey, D. (2005). For space. Thousand Oaks: Sage.
- Norgaard, R. B. (1988). Sustainable development: A co-evolutionary view. *Futures*, 20(6), 606-620.
- Partnership for 21st Century Skills. (2011). A framework for learning. Retrieved from <u>http://www.p21.org/</u>
- Partnership for 21st Century Skills. (2009). 21st Century skills map. Retrieved from http://www.p21.org/storage/documents/21stcskillsmap_geog.pdf
- Rammel, C., & van den Bergh, J. C. (2003). Evolutionary policies for sustainable development: adaptive flexibility and risk minimising. *Ecological Economics*, 47, 121-133.
- Ranciere, J. (1999). *Dis-agreement: Politics and philosophy*. Minneapolis: University of Minnesota Press.
- Ranciere, J. (2010). Dissensus: On politics and aesthetics. New York City: Continuum.
- Reid-Henry, S. (2010). The Territorial Trap fifteen years on. Geopolitics, 14(4), 752-756.
- Shannon, P. (2011). *Reading wide awake: Politics, pedagogies, and possibilities.* New York: Teachers College Press.
- Street, B. (1985). Literacy in theory and practice. New York: Cambridge University Press.
- Swyngedouw, E. (1997). Neither global nor local: "Glocalization and the politics of scale". In K.
 R. Cox, *Spaces of globalization: reasserting the power of the local*. Minneapolis: Guilford Publications.
- Winder, N., McIntosh, B. S., & Jeffrey, P. (2005). The origin, diagnostic attributes and practical application of co-evolutionary theory. *Ecological Economics*, *54*, 347-361.
- Yapa, L. (1991). Is GIS appropriate technology? *International Journal of Geographic Information Systems*, *5*(1), 41-58.
- Yapa, L. (1992). Why do they map GNP per capita. In S. K. Majumda [Ed.]. *Natural and technological disasters: Causes, effects and preventive measures*. Easton, PA: Pennsylvania Academy of Sciences.
- Young, J. (1999). The exclusive society. Thousand Oaks, CA : Sage.