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48 Capabilities of Highly Educated People

Towards Defining Customer Requirements for Educational Institutions --What Streets of Hard Knocks and Schools/Colleges Are Supposed by High Performers in Diverse Fields & Users of School Graduates to Provide

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Research Questions--causes of top performance in traditional fields, effective operations across disciplines, & solving problem in gaps between fields

1. What causes certain people to rise to the top of all traditional disciplines?
2. What is a scientific basis for cross-discipline work?
3. What will solve the narrowness problem of traditional disciplines causing more and more problems to fall in the cracks between them?
4. Is there such a thing as "educatedness" distinct from effectiveness and creativity, such that people can be effective and/or creative in various ways yet underperform for lack of "educatedness"?

The Orthogonal Disciplines research project got 315 eminent people in 63 strata of society, half American, half global, to nominate what enabled the best people in their own field to rise to the top, producing 54 orthogonal fields, cutting across all traditional fields and determining who rises to their tops, then they were asked to nominate 150 people in each of those 54 orthogonals. One of those orthogonals was "educatedness". This paper reports what 150 highly educated-acting people, thusly nominated, said constituted their own "educatedness" and "educatedness" as they encounter it in others. In doing so it provides answers, some quite partial, to all the above research questions.

Research Approach and Method--two level nomination process identifies highly educated acting people asked to specify what educatedness is:

1. tap social consensus on what "highly educated people" are capable of, if it is there and accessible via indirect approaches
2. to bypass and/or heal ideological factions blocking policies to promote higher levels of educatedness attainment
3. by asking a highly diverse set of eminent people to nominate the most "highly educated-acting" people that they know
4. then surveying those "highly educated acting" people for what constitutes, in their view, their own "educatedness"
5. then surveying them for what behaviors and capabilities they expect from highly educated persons like themselves
6. get both representational and relational definitions of educatedness from these "highly educated-acting" persons

Philosophers of education have distinguished education from learning (Arendt, 1954. 1993), procedural from declarative knowledge (Russell and Norvig, 2003), literacy in one's own civilization from literacy in handling diverse civilizations (Geertz, 1983), training

for performing existing social roles from training for inventing new social roles from training for refounding existing social roles on new technical and social substrates (Brown and Duguid, 2000), educating in order to socialize kids to your favored values from educating to free kids from your favored values (Anderson, 1983). These distinctions, are lost in a clutter of ideological conflicts about what sorts of human beings "to make" via education system Goliaths. Five dysfunctions in policy discussions by publics and policy makers on "educating" and what it is to produce, from ideological contexts of discussion, are identified in this paper. Nevertheless, there might be considerable social consensus on what "educated person behavior" is, in various situations, available, perhaps, if we approach people outside of their usual ideological contexts. This paper reports the tapping of that latent consensus using artificial intelligence techniques from expert system building "protocol analysis" and customer requirements assessment techniques from total quality programs. The model it produced potentially resolves the five dysfunctions in policy discussions of "educating" and its intended outcomes. 150 people, nominated as "highly educated-acting" by 315 eminent people, half American, half global, in 63 strata of society, were given surveys asking them in over 20 diverse ways what their own "educatedness" was and what "educatedness" was in others. This paper reports a thorough bottom up categorization of their collective answers.

Research Results--two categorical models of the 48 capabilities shared by most "highly educated-acting" people, one from 150 highly educated people and another from philosophers of education, for comparison purposes.

Content analysis of survey results was done, marking behaviors unique to educatedness, marking distinctions of educatedness from effectiveness and creativity, naming marked ideas, grouping similar such ideas, ordering them, resulting in a model having 48 distinct dimensions of "educated person behavior" (each dimension of the 48 in the model was mentioned by at least 20 nominees). The same procedures were applied to texts by well cited philosophers of education, getting their behaviors of educated-acting people to form a basis of comparison with the first model. Use of the first model to assess the degree of "educatedness", produced by various institutions and instructors, and to specify exact solutions, for certain hard-flaws-to-correct in business persons, that any manager encounters, is described.

Key Words : Educatedness, Learning, Cross-discipline, Capabilities, Tacit Knowledge, Communities of Practice, Knowledge Management, Procedural Literacy

Axe Grinding as Policy

A number of problems in education policy making stem from missing consensus on just what "educating" should mean and produce. First, plural goals of "educating" are accepted for some institutions and not accepted for others. Huge, entire discussions of education, school, and college policy take place with no consensus on what the purpose, output, and product of education is to be. Knowing what you are trying to produce is a prerequisite, logical and practical, for actually succeeding in creating it via any sort of institutional arrangement. Till we have an agreed on endpoint to produce, we will by definition always fail to achieve it, one could argue. The plurality of educational goals, endpoints envisioned, and actual outcomes tolerated by colleges does not bother us (though people paying for college educations, especially state governments and federal funders have raised serious questions) until people suggest repeating it with young impressionable children, in public schools, unable to protect themselves from lives ruined in childhood by adults, factions, or cults imposing partial ideas on young minds without access to alternative views. Any of a number of diverse outcomes from college experience is accepted in society while that same diversity from education of younger people is not tolerated for this and other reasons. We are inconsistent about the acceptability of plural intended educational outcomes.

Second, discussions of educating frequently are not discussions. Why are rational, constructive conversations about the nature, purpose, produced-endpoints of

education and its institutional components so rare, hard to find, impossible to continue--ideologies in a word (O'Neill, 1981). People speaking ideologically have more or less publicly declared their intention to act in an un-educated manner, foreclosing differences and arguments in principle without ever hearing them or seriously using them to scan for flaws in their own current personally favored ideas and opinions. Nothing demonstrates the failure of existing institutions of education so well as adults now unable to speak about it non-ideologically--the institutions have generated several generations of uneducated people, now adults determining the future of the education function in society via commitments to certain institutionalizations of that function (Arendt, 1954). Serious psychological research has found, repeatedly across decades of different research and researchers, that people who defend and attack when their ideas are attacked are trapped in a teen-age mentality that healthy adults outgrow via experiencing diversity in college. Such people "are" their ideas, that is, their identity is wrapped up with their beliefs so that attacking their ideas is felt as an attack on their selves, rather than being people who "have" ideas, that is, temporarily commit to some until new data induces them to update their commitments (Kegan, 1994). Ideologues are teenage mentalities trapped in adult bodies, the gap between frozen teenage contents of cerebral cortex and aging body cells growing ever larger till united in death (Tannen, 1998).

Third, partially polluted discourse on "educating" quickly becomes totally polluted discourse. Political correctness, culture wars on campus, religiosity, revenge of various oppressed ones on any inequality of treatment in language or nuance, and a general yearning for child-like self righteousness and divine justification for ill-formed personal commitments and beliefs have contaminated discourse and publishing to the point that bad "idea" currency is driving out good currency in setting after setting, journal after journal, newsgroup after newsgroup (Bok, 1990). Italian state-funded experiments in cyberdemocracy floundered extremely rapidly (Tsagarousianu et al, 1998) as the least educated, loudest, most self righteous members of Italian society dominated electronic democracy forums till anyone of any sensitivity and openness to new ideas was driven out, leaving bigots brow-beating other bigots, a parody of the Athenian ideal we all love to remember back there when Western Civilization was first formed. Huge groups of "college" "educated" adults are now simply incapable of coherent discourse and learning from discoursing with other people.

Fourth, when particular cultures evolve in vision and value towards superficial materialist "success" they are countered by dissidents promoting sacrificing all for the sake of justice and equality, the result--unpalatable polar opposites--does not acknowledge educating as finding better things to learn. What happens when an entire Civilization aspires to wealth, fame, entertainment celebrity, instant venture-capital public-offering riches? Do we celebrate the liberty and carefree lives without material suffering that aspire thusly or do we shudder with fear at the down-trodden billions whose excruciating daily misery goes forgotten and overlooked in aspiring thusly? Don't individuals and groups have the "right" the "freedom" the "god given blessing" to pursue pink cadillacs, and selfishness in all its glories and forms, now that we know that Adam Smith's hidden hand will magically turn it all into net per capita GDP growth and technological solutions to long standing human condition detriments? On the other hand, is not human suffering so huge and enduring that, in its name, undoing all human endeavor except alleviating that suffering, would merely return us to the Jacobin Leninist terror (Arendt, 1965)? Much of the contentiousness of discussing educatedness comes from the fact that education, unlike learning, concerns learning better things to go after learning, not just accepting existing goals and aspirations for what to learn and what to grow oneself into.

Now combine an entire adult population manifestly uneducated though with much learning and an issue that involves getting people to learn better goals to aspire for rather than learning merely how to obtain better, faster what they now happen to aspire for. The result of this combining is our societies' current inability to make headway on educational issues. One would think, listening and reading existing discussions of education issues, that societies without anyone educated in them are ill prepared to determine how to "educate" anyone new to this world now.

Fifth, education, of children, offers an easy way out to cults, societies, and ideologues unwilling to persuade mature adults. A final component of this mess is how ideologues, factions, cults, and industries of all sorts love using children to change the world. This appears in almost innocuous form when people apply to Ph.D. programs in the world's best universities--if you are over 30 when you apply there is a distinct lack of professor interest in having you in their Ph.D. program, in not

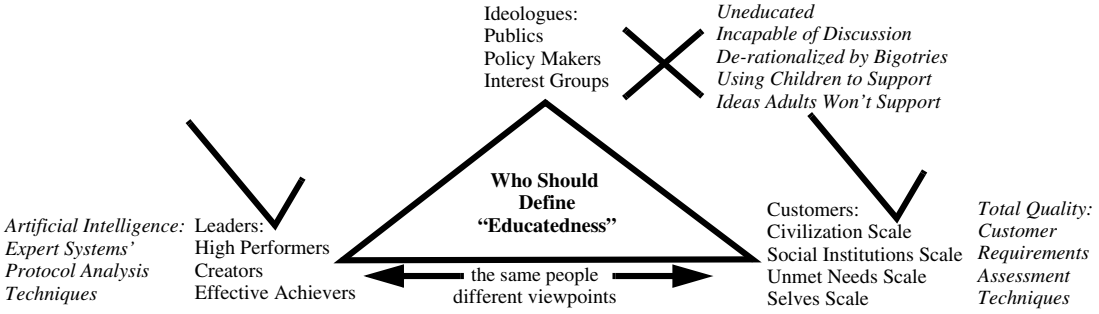
a few cases--you lack something that younger people have in abundance--an ability to blindly follow without questioning your betters. Education is such an issue because so many constituencies wish to mold young innocent malleable people before they can think for themselves and judge wisely. So many factions in our society lack the courage, guts, and ability to persuade thinking adults--they prefer unthinking naive children. This less than laudable drive to get to kids before they can judge well for themselves ends up coating entire worlds with ads for greasy heart-disease-creating foods. Education is central because it is an easy way into people's minds at low cost with superficial editing by the people being influenced. When you see religions, political extremists, fundamentalists sequestering kids into clique schools where they won't be exposed to dangerous ideas from other views of the world, then you see cowards using kids to justify beliefs they dare not try to justify to thinking adults. This is un-educated behavior in its purest, and perhaps vilest, form.

Suppose We Ask Educated People and Users of Educated People What Educated Behavior Is?

Is there any consensus on what the behaviors of "educated" people are, and if so, how do we find it, when the above five problems derationalize discussions of this topic? If we give up on letting educatedness be decided by manifest bigots, uneducated bores, self-interested industries, pompous religious self righteous ones, and ideologues, who might we turn to? We might turn to whomever, in our societies, our best, most accomplished, most admired people tell us are "behaving in an educated manner". That is, we might ask highly effective people, highly accomplished people, and highly creative people whom they see as acting in a most educated manner. Then we might go to those people and ask them what they consider "acting in a educated manner". This is the approach used in prior research in artificial intelligence to define expert-novice differences in field after field. The best people by some crude approximate criterion were asked to nominate the best people by some less crude criterion and those nominees were interviewed for their ways of doing things, which ways were then compared to novice ways in the same domains (Sternberg, 1999; Ericcson and Smith, 1991).

From the perspective of total quality theory (Cole et al, 2004; Greene, 1993) we can define behavior types such as educated behavior by asking customers who receive it as output what behaviors satisfy their requirements of educated behaving (and which do not). Who are the customers of educated behavior? Our entire civilization is one--it needs each generation capable of changing the basics of civilization just enough to forestall massive historic scale civilizational decline. Our social institutions are another--they need people capable of conforming to existing roles and performing such roles competently. The needs of people and institutions not being met by existing institutions and social roles are another customer. They require that each generation be capable of sensing needs and developing the political skills of changing roles and institutions to meet them. Our selves are another customer of educations--we require of the educations we receive (on streets of hard knocks or in schools and colleges) that they get us to learn to continually require better things of ourselves, to continually measure our selves by ever rising standards of performance, to never let our lives settle down to self satisfied mediocrity and thing-like vegetation. We require, in short, that we get educated to the point that we aspire to be fully human, not partly human or non-human inert. If we go to highly effective people, highly accomplished people, and highly creative people and ask them what civilization, social roles and institutions, unmet needs, and our selves currently require the outputs of educational processes to be, we might get beyond ideologues, bigots, religious self righteous ones, and other uneducated answers.

This Paper's Method: Mentors and Customers



Grounding This Research

As a manager in industry I encountered skilled, highly schooled people (MBAs from top ten colleges), highly motivated, also highly effective who yet under-performed others at work, seriously enough, that I and other managers sought to get rid of them in subtle then overt ways. Since they had excellent credentials, lots of skills, and were effective in several domains, we all asked ourselves "what's the problem then?" The problem was subtle, but ongoing and severe. The problem was with the amount of people-ness in these persons. Some had too much people-ness and others had too little people-ness. That is to say, some of these people were over-bearing so that social negative side-effects of their heavy-handed way of operating nearly always overpowered the good that they did. Others were under-bearing, that is, too tentative, too timid, too little verve, personality, and elan about them so that nearly everything they did became perfunctory, even when crises and urgencies clearly required something more. Here the lack of side-effects from their work was a problem. Years of experiencing and looking at this phenomenon culminated in me identifying "educatedness" as what these employees lacked. They acted in uneducated manners.

There is another grounding approach. O'Neill many years ago, on valid statistical grounds, identified educational ideology types that are interesting to review in US and Japanese forms when thinking about "educatedness" and how to define its component capabilities

Six Educational Ideology Types as They Appear in US and Japanese Forms

USA, from O'Neill, 1981		
fundamentalism	equip people for superior righteousness to current decrepit society	revive and reaffirm older and better ways
intellectualism	from opinion to evidence based reasoning	identify, preserve, and transmit truth
conservatism	equip people to prevent changes in society	preserve and transmit establish patterns of social behavior
liberalism	compete for success	promote effective personal behavior
liberationism	cohorts are critiques of society	equip people for social reforming
anarchism	denationalize schooling	let communities invent own forms of schooling
Japan, from Greene, 1993		
fundamentalism	ethnic "Shinto" fundamentalism, maintain the purity of the race	introduce people to the divinity of the nation Japan
intellectualism	excel in amounts of memorized contents	induct entire generation into globally competitive levels of math/language performance
conservatism	equip people to prevent changes in society	create people dependent on maintaining existing leaders of society in power
liberalism	compete for success	promote rote memorization required to enter best universities by exam
liberationism	communist teacher's union	create people equal to all other people to undo historic class system remnants
anarchism	drop outs and private schools not linked to university entrance	develop talents for unusual careers not dependent on university education

Though each ideology type has its own constituency within a national population, each cohort of students graduated from education institutions (and from their first 20 years of life) confronts an entire society filled with people who expect "educated" behaviors from the cohort's members. If some clique, enamored of a particular educational ideology could succeed to graduate students only into environs and institutions conforming to their particular educational ideology this would not be a problem. But no such clique has succeeded in doing this or probably can succeed except at the cost of permanently marginalizing themselves in society at large into ultimate self extinction (nearly by definition). So cliques preferring particular educational ideology types and perhaps imposing them for the first 20 years of life on some cohort, graduate that cohort into a much larger society of diverse expectations about what "educated" behavior is, largely not conformant to that particular ideology's norms. Regardless of how "right" your favored ideology is, you have this problem of getting good performance, good careers, and good lives by cohorts done in a society committed far beyond your favored ideology. Hence this paper's dual approach--the expert-novice differences-in-how-you-perform-in-society and the total quality what-various-aspects-of-your-society-require-of-your-behavior approaches--makes sense. Whatever your ideology you have the same huge diverse society to perform the rest of your life in and you will either live as novices do or as high performers in that society do and you will either satisfy aspects of your society with the life you live or you will frustrate them with the life you live. These two performative ways to define "educatedness" have the nice property of closely tracking your ultimate influence on and success within existing society at large. We can find, using them, just how much society-at-large wants each of the wants of particular educational ideology communities (just how much does society-at-large want people who are good

are preventing social change? people who are more righteous than others around them? people better at succeeding than those around them? and so forth).

The Sample

The basic design of this research is summarized in the diagrams below, the first giving the samples and research process and the second giving the strata used in the stratified sample employed.

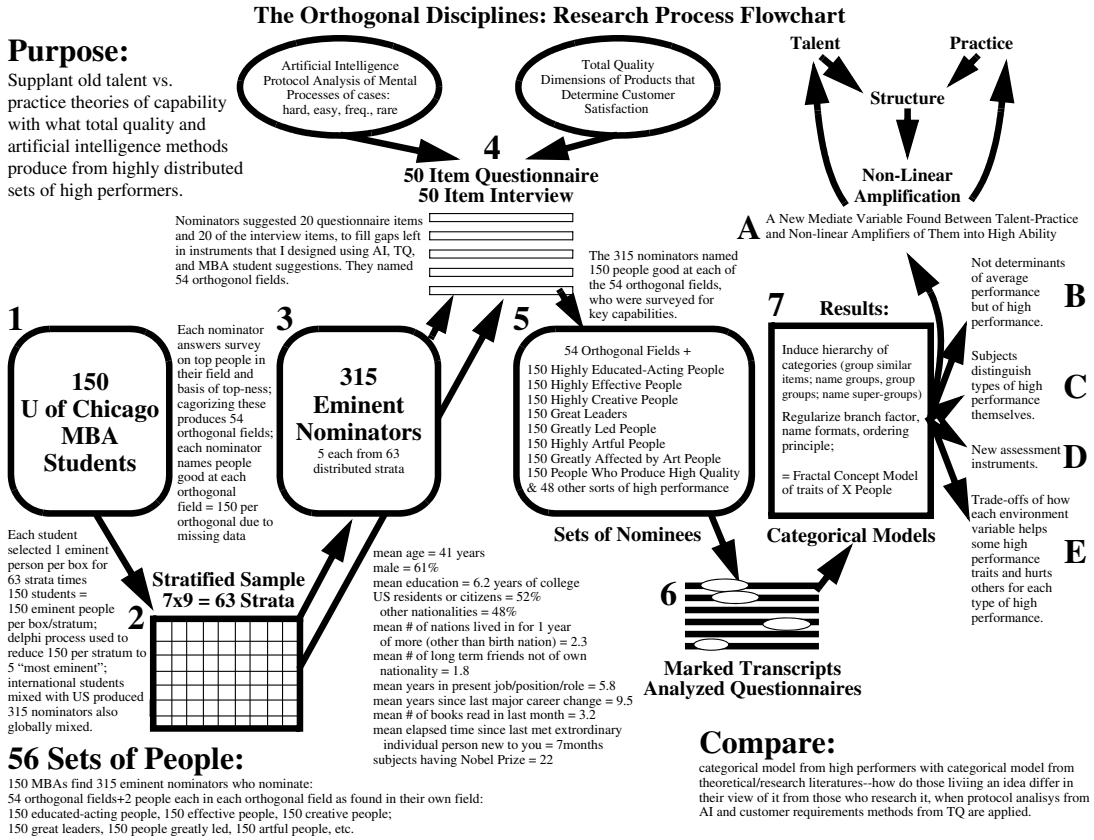
Survey results were content analyzed with variables affecting how educatedness was achieved, what was the core of behaving educatedly, and what was considered educated behaving, marked and categorized, first for each of the 17 doorways (see the section immediately below this one), then results across doorways merged. Similar results across survey subjects were grouped resulting in 128 educated behaviors. A further more painstaking analysis of similarities among behaviors reduced that number to 48 types of educated behavior (this mostly involved spotting overly elaborate behaviors in individuals and treating them as combinations of two or more simpler educated behaviors found in other creators already). These were then grouped and groups named resulting in 16 sets of 3 behaviors each (Greene, 1993, Knowledge Modeling for Quality, chapter 19). The 16 sets were then ordered and the behaviors within each set ordered, following similar principles of ordering (this results in the Fractal Concept Models, triangle displays of which appear below in this paper). A book was made (Greene, Are You Educated?, 2003), with twelve pages per behavior for all 48 behaviors, created for use with research collaborators, undergraduate courses, and organizations wanting their educatedness situations assessed. Research literature in many fields was then surveyed for models of educatedness capabilities similar to those found in surveys (1600 books were surveyed, full citation, impossible due to space here, is found in Greene, Are You Creative? 60 Models, 2003). Where such similar models were found, terminology of the educatedness behavior was changed to make such similarities evident. In many cases survey subjects combined multiple behaviors, or used one behavior early in their career and another later, or elaborated variables beyond what education research literature mentioned in similar models. The triangle and table-format illustrations at the end of this article present the model of 48 capabilities of educated acting people as completely as present space allows. Uses of the model, to be explored in future research, are discussed below.

The Survey

Initial test surveys were not satisfactory at getting the images of "educated behavior" in subjects of the surveys. Gradually certain doorways were found that did succeed at getting people to articulate who "educated acting" people were and what about their behavior was "highly educated". In addition, we asked everyone "what exactly are highly educated people good at and capable of that less educated

	Science	Art	Humanities	Social Science	
Economic	technology ventures, idea markets, invention markets	museums, exhibitions, concerts, tours, coffee houses, clubs	resource limitation management; mystifications, historic preservation	economics: markets, pricing, regulation, trade regimes & orgs	
Political	voting gaming representation campaigning	awards, cannons	agreement limitation management, power embeddings realization	political science: elections, campaigns, administrating, consensus	
Cultural	ethics and religion policy making social clubs charities	art venture districts	meaning limitation management. false consciousness identifying	anthropology: deliberate culture invention, community enhancement	
Social Change	democratization globalization	social cabarets	confidence and direction limitation management, frame-limited revolts	sociology: social process and structure-- decline, fixing, invention	
Traditional	astronomy geology meterology oceanography space sciences	painting, music (song writers, performers, conductors), sculpture, dance, comedy, drama (theatre stars, movie stars), poetry,	history philosophy	tribal community: festivals, calendars, wealth inheritance, bias in laws	
Establishment	physics biology chemistry math	performance, design	literature, counseling regimes, critics, awards, theatre industries	rise and fall of civilizations, rutted cultures	
Emerging	information media silicon and non-silicon computing h/w	digital art, interactive art, socially composed art, cyberart, virtual worlds	applied humanities, group composing, composing contests	networks, social virtuality	

people are not good at or capable of?" and, "how would a not highly educated person do X" and "how would a highly educated person do that same X". The less direct doorways, below, however, were more effective in many cases.



	Engineering	Professions	Fad & Fashion	Lifestyle	Systems
	financial engineering, inventors agriculture	business and management advertising & marketing	fashion designers, branding, multi-industry marketing by events	housing, communities locale type	technical innovation, quality movements
	cyberdemocracy, internet funding of campaigns, net volunteer management	administration military	party politics, third party movements	involvement dimensions	policy deployment, dissatisfaction deployment
	community organizing, environmental,	religion education	lifestyle inventions, green movement	performing-consuming balance; diet, videogaming, manga	diversity management & expansion
	innovation venture districts/clusters	movement builders	intellectual movements, liberation movements	social entrepreneurs, self funding "profitable" charities	coalition building, foundation grants
	exploration, civil, architecture	medicine, nursing welfare	crowd generation, trend riding marketing, trend seeding, social imbalance exacerbations	festival organizers, theme parks, global event organizers	value sharing, negotiation, non-medical healing, reputation networks
	mechanical, electrical, aeronautics & space	law & justice	epidemic generation, rights movements (human rights etc.)	consumer movement	value sustaining/imposition
	biological & genetic, computer, internet society, nano tech--their blends	info tech, quantum devices	internet options: 6 billion channel TV broadcasting, agile economy	lifestyle inventors, micro institution development via viral growth regimes	complex adaptive systems research

Doorway 1: Metaphor
What is a highly educated acting person like? What is their way of operating like?
Doorway 2: Difficulty
What stymies or stops or defeats everyone except highly educated acting people?
Doorway 3: Uniqueness
What about how highly educated acting people do things clearly reveals the educatedness with which they act?
Doorway 4: Evolution
What about the most "educated acting people" you know now differs from the most "educated acting people" you knew decades ago? How is the set of capabilities that educated acting people have changing over time? In what direction?
Doorway 5: Surprise
What surprises do highly educated acting people generate through their work? What do they do that less educated people do not do? What do they not do that less educated people do do?
Doorway 6: Wit, Inventiveness
What do highly educated acting people invent or improvisationally do that less educated persons do not do?
Doorway 7: Revolt
What mistakes, faults, flaws, or errors in people or the matters of your domain do highly educated people engage or solve that others skip or exacerbate?
Doorway 8: Alternative Way
What would highly uneducated doing of X look like? What would highly educated doing of X look like? What other highly educated way of doing that same X is there?
Doorway 9: Factors
What factors tilt a person toward highly educated behaving? What factors tilt a person away from highly educated acting?
Doorway 10: Alien Viewpoint
Would an alien from another world be able to distinguish people on the basis of whether they were highly educated-acting or not? If not, why not? If so, what would they notice to make this distinction?
Doorway 11: Conquest
What do highly educated acting people conquer that less educated people fail to conquer?
Doorway 12: Emergence
What emerges from the actions or behavior of highly educated acting people? What do they produce beyond what they envision or intend producing? Why? How?
Doorway 13: Hiring
What do you expect of people you hire that you get only from highly educated acting hires?
Doorway 14: Civilizational Need
What behaviors from people do particular aspects of our entire civilization need that are in terribly short supply now? What specific aspect of our civilization needs what specific behavior type? Why? How?
Doorway 15: Social Needs
What unmet social needs today are noticed and practically engaged only by a few special people? What do most of us lack that causes us to not notice or not practically engage these needs?
Doorway 16: Self Growth
What limits to your own aspiration and growth as a person have you accepted, perhaps harmfully, that more highly educated acting people probably would not have accepted? What people do you know have settled for less than life really offers them and what do they lack, in terms of specific behaviors or capabilities, that causes them to settle for less?
Doorway 17: Panoply
What are all the behaviors that highly educated-acting people you have known exhibit? What are all behaviors you can identify found only in people not highly educated-acting? What are all the types of capabilities that highly educated-acting people have that others do not?

Each doorway was asked four different ways during the survey. One of those four ways of asking was a game or prop manipulation of some sort, asking the subject to use a tool or prop in certain ways to indicate highly educated or not highly educated behaviors.

In addition, why each nominator thought each nominee "highly educated in his/her acting" was captured, before the nominees were surveyed, and used to make items such as the following, given to the nominees during their surveys.

> You are on a national prestigious committee, surrounded by people who seem famous and superior to you in accomplishments, and, after six meetings, you notice that everyone on the committee thinks and lives in highly similar ways. Based on nothing much more substantial than this you take the following action:
>
> a. relax a bit and begin to enjoy the shared values, ways, and goals of the other committee members

b. challenge the committee to think outside its comfortable box
c. bring along a guest to the next meeting who, though accomplished, is entirely different in style and way-of-thinking

A director of your organization, who has not met you personally except in the most superficial slight ways and about whom you know nearly nothing is circulating a letter highly critical of you in parts to other eminent people in your organization. You respond by:

a. asking around to find out more about this person and what might have set them off against you
b. circulate a note of your own pointing out faults in this director or his/her actions
c. phone the director, apologizing for whatever from you irritated or disappointed him, and ask for a meeting to get his/her advice

An employee or other sort of subordinate of yours, works competently but shows absolutely no interest in continually improving or over the long term further developing their life and capabilities. A certain ambitionlessness hovers about him/her. Write how you would respond in the lined space below:

Frequency Distribution of Results: How Many of the 150 Subjects Mentioned Each Category of the 48

The surveys probed in 17 different ways (called "doorways") for educated behaviors. Two remarkable respondents supplied more than 6 specified educated behaviors per doorway on average (more than 100), as marked sections of the transcripts of their surveys. The mean number supplied was slightly more than 1.08 per doorway (18 total mean number supplied per person of the 150 person sample). 11 items were mentioned by more than 55 of 150 subjects; 18 items were mentioned by between 55 and 64 subjects; 6 items were mentioned by between 45 and 54 subjects; 13 items were mentioned by between 15 and 44 subjects. In subject transcripts absolutely every educated behavior found was marked, then grouped and categorized, within doorways, across doorways within subjects, then across subjects. A more or less arbitrary cut off point of 20 was selected--items mentioned by less than 20 subjects of 150 were dropped. This number was chosen because the next most frequently mentioned item was mentioned by only 7 people, the biggest gap in frequency found overall. Over 111 behaviors mentioned by less than 15 people each, most by less than 3, were dropped

Frequency Distribution of Top 48 Categories: rounded # of surveyed subjects mentioning an item, cut off 20
(the item numbers below match triangle numbers in the triangle model--the larger number in each triangle is the page number of the book presenting the model in detail, the smaller number in each triangle is 1 to 48, indicating item numbers below)

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from the model of 48 categories presented here. That is because this paper sought some measure of consensus about what educated behaviors/capabilities were, not unique ideas not supported by other people.

Minimal Description of All 48 Capabilities of Highly Educated-Acting People

Highly educated-acting people have four general high-level capabilities. First, they can find and construct truth. Second, they can build and use models to guide thought and action. Third, they can manage and leverage social and other forms of diversity. Fourth, they can invent self and others/organizations throughout their lives.

Finding and making truth involves four component capabilities. First, highly educated-acting people make themselves, often undoing socialization and other processes by which others, organizations, and societies try to make them. Second, they create truth, often undoing truths foisted on them by more established and powerful others willing to distort things for personal advantage. Third, they befriend the limits of life, neither being demoralized by the ineradicable ones nor overly respecting the socially or self erected ones. Fourth, they manage learning by making distinctions, finding distinctions, and inventing distinctions never seen before. Making yourself involves leaving home, that is, all aspects of your identity that you did not consciously choose yourself. It involves not using your background to excuse your faults and flaws, that is, taking full responsibility for all that you are, good and bad. It also involves determining your self, consciously, by eclectically choosing from history's best and the contemporary world's best models to copy and follow, replacing unconsciously imbibed models put in you by powers-that-be while you grew up. Creating truth involves growing a personality by continually running into how who you are, your identity, sustains the problems you continue to be unable to solve. You learn to "be" less and less and switch to "having" those aspects of your identity you used to "be". Creating truth also involves reasoning with evidence, basing your action and thought on evidence not mere opinion. Creating truth also involves demystifying authorities of all sorts, who automatically have power over you. You learn to take back such automatically given powers, seeing how people purporting to have your interests in mind actually have hidden self interests so they are only pretending to have your interests in mind. Befriending limits of life starts out with being able to face the anxieties of existence rather than hiding from them or fleeing from them. It involves taking responsibility for the flaws, faults, risks, errors, biases, and limitations found in your education. You pursue two curriculums at once--the one society shoves at you and another one you devise to compensate for the weaknesses in the first one. It involves taking responsibility for the flaws, faults, risks, errors, biases, and limitations found in all social institutions and roles. You develop a dual life here too--conforming with what institutions demand while compensating for the flaws in what they demand with a second tactical stream. Managing learning involves distinguishing elemental life dimensions in all that you face, ever refining those distinctions as your life progresses so you distinguish more and more dimensions. It involves penetrating cultures foreign to you, of persons, organizations, spouses, nations, genders, eras, professions, by perceiving distinctions they make that you do not naturally make. It involves finding good questions to tackle rather than getting occupied with agenda items foisted onto your life by more powerful others. All these together constitute finding and making truth.

Building and using models involves four component capabilities. First, highly educated-acting people grow ideas, in the steady dependable way that farmers grow crops. Second, they grow methods of work, developing repeatable, improvable, explicit ways of doing things rather than staying at hoc and irregular in how they work. Third, they extend their minds with tools outside their skulls to amplify what their brains are not all that good at--noticing everything, remembering complex patterns, storing volumes of multi-dimensional information. Fourth, they leverage the limits of knowledge itself by forcing knowledge from dry useless fact status into applicable form. Growing ideas involves turning every experience you have and everything you read into explicit models you can apply in the future to guide action and impact situations. It involves developing the habit of transforming the experiences and readings of your life into such tangible, usable products. It involves transforming the historical into the personal and transforming the personal into the historical, in every situation of your life, so you fully explore personal responsibility for and influence on things and you also fully explore situational causation of and influence on those same things. You stop the game of blaming failures on your situations and blaming successes on your personal worth. It involves using abstractions and metaphors more and more as you age, so that the ideas you change have wider and deeper scope, expanding your power as you age. Growing method

first of all involves the capability of applying mental operations not to single meanings or ideas but to structures of meanings and ideas. It involves also not merely collecting knowledge but mastering how to apply various mental and social operations to all the knowledge you collect. It finally involves becoming literate procedurally--that is, learning the procedures by which the world's most effective, most educated, and most powerful people use to get things done. Extending your mind involves improving ordinary mind extensions like your personal professional library, your file system, your network of friends who perform cognitive functions for you, your cognitive architecture, cognitive furniture, and cognitive apparel. It involves learning to attribute properly and meticulously so you never exaggerate to yourself or others how smart you are, using ruthless self honestly to keep you growing. It involves discovering the tipping points of society, institutions, roles, and personal relationships--that is, those very rare points where very small slight inputs produce huge whole system changing outcomes. Leveraging knowledge limits involves mastering the flaws in how human minds work, such as the mental errors Kahnemann recently got his Nobel Prize for finding, inventing and using tools that compensate for those flaws. It involves demythologizing ideas, figuring out what parts of ordinary human experience of everyone special words and terms point to, where others get lost in abstract terminology. It involves naming new experiences and concepts well so slight insights turn instantly into repeatably and reliably reusable concepts. All these together constitute building and using models.

Managing and leveraging diversity involves four component capabilities. First, highly educated-acting people manage excesses, not limiting themselves to handling well structured situations well but expecting themselves to handle utter messes well also. Diversity with its unknown norms, rules, habits, preferences abounds in mess potential, handled by well by this capability of highly educated-acting people. Second, they act indirectly, respecting the fragility of people and societies so well hidden by everyone trying to look more important and powerful than they really are. They learn to turn illusions, exaggerations, and fears of others to their advantage without directly puncturing them. This is essential when facing diversity of gender, culture, era, profession, organization, nation and the like, because elephants in china shops result from heavy handed doing of what you know best, when you are in unknown foreign situations. Third, they manage balances, being naturally suspicious of ideas and avenues of action that are too pure, too clear cut, too direct, too simple, too agreed on. They constantly research what is being omitted, slighted, ignored, downtrodden. Fourth, they pursue social transparency--seeing present things from future implication perspectives, seeing self things from impact on others perspectives, and the like. Managing excesses involves, firstly, managing impossible workloads. The older stronger people of the world abuse young people till those young people learn to distinguish good assignments from bad ones, and learn polite ways to bypass the bad ones. It involves managing love, power, money, and failure--all the major market-driven aspects of life--where your value is not determined by you alone but by comparing you with others as alternative suppliers. It involves managing choice--learning to endure the pain of choosing, losing 99 possibilities in order to turn 1 of them into an actuality. The fun of living with everything still possible can ruin entire lives by delaying building a track record of real impact on the world. Acting indirectly involves respecting the fragility of other people and societies. Everyone and every group exaggerates its importance and power so naive people get intimidated too much and fail to engage the world fully, or act so pushily and roughly that they do much harm, not seeing how weak and fragile others really are. It involves being able to not act, to act by doing nothing rather than by being busy. You master vacuum power, Lao Tsu said. This allows the force of others to get directed indirectly by you toward your ends rather than you having to supply force of your own (the jujitsu principle). It also involves creating new cultures that do work for you instead of your personally having to get forceful. Managing balances involves developing your self, your social relations, your career, and your mind in every major period of your life rather than letting one of them get so ahead of the others that your life becomes distorted, neurotic, and ineffective, or self destructively extreme. It involves teaching seniors, superiors, parents, and leaders to stop treating you as a child and to learn to treat you as an adult. This involves the courage to disappoint others' overly low expectations of you, and reject their overly puny trust and assignments for you. It involves balanced living and learning to make moderate mistakes. We show up always with only partial knowledge of life so hidden consequences abound for all that we do. It behooves us to assume hidden dangers of any course of action we choose so we manage ourselves moderately enough not to be destroyed by such unseen consequences. Social transparency is an ability of highly educated-acting people of seeing futures in presents, seeing side-effects in intended tactics, and

the like. It is an ability to not be blinded by your own moments, intents, plans, activities, preferences, history, and self. This involves recognizing and engaging multipliers in whatever society you are in. You do not invest heavily in those parts of society lacking multipliers. This also involves preparing now for later stages of life so what you do now does not ruin later stages but makes them wonderful instead. Smoking comes to mind in this regard. It involves replacing your commonsense of how to think and live every 20 years as the world moves past how you and your generation were educated. In the early 2000s this involves replacing mechanical ideas of strength with biological ideas of strength, replacing mechanical ways of acting with biologic ways of acting. All these together constitute managing and leveraging diversity.

Inventing self and others involves four component capabilities. First, highly educated-acting people turn action into performance. In part they do this by using every situation as a base for further learning and exploration of life. Second, they invent worlds rather than occupy or compete for worlds created by others. They do this in part by not being defined by situations they are in--they rather freely redefine the situations they appear in. Third, they become multipliers themselves, turning all the inputs and experiences of their lives into tangible products that improve, expand, and invent worlds. Knowledge is not inert in highly educated-acting people, it is live and turns rapidly into new actions and products. Fourth, they achieve relevant focus to their lives by working and living in ways that resonate with how the world is structured. They package their lives and work so that it fits the shape of the world they are actually in, so that it works actually in real situations not theoretically in imagined situations only. Highly educated-acting people, in this way, are opposite of overly schooled people or nerds. Turning action into performance involves becoming conversant with all fields of knowledge rather than letting social and institutional forces make you as narrow and brittle as the 20th century world was. Just because the world is narrow and ineffective is no reason you should repeat that fault. It involves being well paid as you explore what life offers and what you can become. Exploring by making solid contributions to specific parts of the world allows you to have a credible hefty track record after ten years or more of exploration of life, rather than being a drifter having contributed nowhere due to ten years of tourism through life. It involves creating the courage to investigate all the rare, famous, impressive, and powerful people, institutions, and situations in the world. Rather than being intimidated into ignoring the best in the world around you, you boldly engage the best people and institutions in your world. Inventing worlds involves creating interest rather than searching for interest. You spot strategically important parts of life and make yourself interested in them rather than merely engaging parts of life you happen already to be interested in. It involves mastering the creativity dynamics of the best performers in the world around you. You actively study the best in the world and copy what they do rather than assuming you can never be as good as others. It involves founding and managing groups without having formal positional authority. You learn to lead every group you are in, whether someone calls you a "leader" or not. Becoming a multiplier yourself involves turning a lifetime of just inputting things into your mind into continually producing outputs with your mind. You consciously break habits of inputting and replace them with new habits you create of outputting hourly and daily and weekly. You talk via what you make rather than talking with your mouth. It involves applying all that you learn to improve yourself rather than improving others without practicing what you preach. It involves studying until self directed learning takes off in you, allowing you to teach yourself anything at all without teachers or colleges of any sort. Achieving relevant focus involves developing consciousness of customers of all your life produces and whether your outputs to them satisfy them or not. You learn to actively ask all who receive outputs of your life, how satisfying they find those outputs. You learn to endure the humiliation of finding, day after day that what you thought was great, others find as so-so. It involves mastering performance--learning how to transform every moment, every work situation, every human relationship into a window through which pours all the mysteries, wonders, feelings, of life itself. You stop the habit of shutting out meaning in order to "do your job". You rather invite profundity to help you "do" better than your job. It involves achieving absurd concentrations in everything you do. You carry everything to world biggest extremes so that visibility and curiosity, press coverage and consulting, accompany everything you do or like or try or invent. All these together constitute inventing self and others.

Uses of the Model of 48 Capabilities of Highly Educated-Acting People

A word on the uses of this model is appropriate here. Highly effective, creative, high performing, and educated-acting people, in my sample, expected

dozens of the above 48 capabilities of any highly educated-acting person. Schools, families, and selves that do not produce these 48 capabilities do not satisfy actual requirements of the US's most educated-acting people, so far as they are represented in my sample. Uneducated people lack many if not most of the above 48 capabilities, according to the people in my sample.

There are several interesting implications of this paper's model. First, you can be an absolute master of finance and math, accounting and ambition while lacking every single one of the above 48 capabilities. You can have graduate degrees in a half dozen fields while lacking every single one of the above 48, though that would be somewhat difficult to accomplish. Second, highly effective people can under-perform because they lack educatedness. Negative social side-effects of their achieving of their goals can overwhelm any benefits of achieving those goals. Third, managers in industry find such under-educated people the hardest personnel problems to handle because no company training program handles any of these 48 dimensions of educatedness (except very peripherally, the managers themselves report). Diagnosing, considered by itself, is a tough problem in industry. Even were diagnosis possible in industry, companies today lack programs for handling excess person-ness and inadequate person-ness. A tool, such as the model this paper produced, distinguishing 48 separately identifiable and learnable dimensions of educated-acting behavior might help industry, both with diagnosis and treatment. Fourth, schools lurching from one ideology's type of education to another, can manage to never produce any of these 48 capabilities expected by US high performers, creators, and highly educated persons. As discussion of the educating issue is derationalized in the five ways that started this article, consensus that is manifestly there, as presented in this paper's model, gets ignored and not acting on. Perhaps an inability of our uneducated leaders and public to talk in educated-ways prevents the consensus there from being talked about, respected, recognized, and applied in policy making. We lack the educatedness of discussion skills to promote educatedness as defined in this paper's research by our most respected, lauded, admired, emulated, awarded people. Fifth, the 48 capabilities that were mentioned by at least 20 of the 150 people surveyed in my sample, represent a consensus of sorts among people in society of high accomplishment and capability. It is striking how mildly progressive these 48 capabilities described by them are. Fundamentalism, conservatism, and anarchism are not represented in the 48 capabilities mentioned by my sample. In part this may be a result of the way my research instrument asked respondents to distinguish behaviors of highly educated-acting people from behaviors of highly creative and highly effective people. My instrument was after educated-acting people's behaviors, not creative or effective people's behaviors.

Now that we have this model, what can we do with it? Following the above paragraph we can: 1) enhance highly effective people operating now in uneducated manners, lacking some or all of this paper's model's 48 capabilities; 2) turn this paper's model into a tool for diagnosing which of 48 capabilities of highly educated-acting people a person in industry or a college grad lacks; 3) turn this paper's model into a tool for assessing and developing each of the 48 capabilities of highly educated-acting people for use in industry and to measure outcomes of universities; 4) replace non-discussions among publics and policy makers about the ends and means of "educating" into replications of this paper's research, done locally, to define an operational consensus by society's best performers and users of the people education produces; 5) turn this paper's model into a tool for diagnosing exactly how a discussion among publics and policy makers is being derationalized by bigoted, rigid, ideological uneducated behaviors; 6) use this paper's model to "educate" the fundamentalist ideologues, the conservative ideologues, and the anarchist ideologues in publics and policy makers as to the lack of support among society's high performers for their value sets and rigid behavioral prescriptions.

Comparison with Multiple Philosophers-of-Education Ideas on the Traits of Highly Educated-Acting People

The 48 capabilities of highly educated-acting people in this paper's model cannot easily be appreciated till you compare them with what well known others have stated were the capabilities of such people. I chose, for this short paper, a few dozen books by philosophers of education, each of which contained a few principal behaviors expected of or key to identifying highly educated-acting people. I analyzed their texts exactly as survey transcripts were analyzed above, building a model as above done. Since the philosophers in my set represent the last 100 years of theorizing and dozens of nationalities (though largely Western cultures), the enduring interest in and citation of their ideas throughout educational research literature makes them an interesting and somewhat valid base of comparison with the new 48 capabilities that this

paper's research produced. First, I examine which of this paper's 48 appear in the philosophers' 48, and, which of the philosophers' 48 appear in this paper's 48. Then, I reflect on what causal, social, intellectual forces or traditions make philosophers of education see the capabilities of highly educated-acting people differently than the way high performing people and users of highly educated graduates see them. Of the 12 items under Finding and Making Truth in this paper's model, 9 are found in the philosophers' model (only the 3 under Managing Learning in this paper's model are missing in the philosophers' model). Of the 12 items under Building and Using Models in this paper's model, 2 are found in the philosophers' model (Developing and Using a Menu of Frameworks and Transforming the Personal into the Historical and Vice Versa from the philosophers' model). Of the 12 items under Managing & Leveraging Diversity in this paper's model, 4 are found in the philosophers' model (Managing Diversity, Love, Power, Money, and Failure; Respecting Fragility of Others and Civilization; Balancing Self, Social, Mind, and Career Development, and New Commonsense). Of the 12 items under Inventing Self and Others in this paper's model, 3 are found in the philosophers' model (Creating the Courage to Investigate, Applying Knowledge to Change You, Self Directed Learning Take Off). Finding and Making Truth is nearly the same in both models (9 of 12 covered), but the other 36 items of this paper's model are barely touched by items in the philosophers' model (2 of 12, 4 of 12, 3 of 12, respectively). Philosophers of education, then, emphasize truth finding but slight model building, managing diversity (they emphasize handling culture but are vague about how to handle it), and inventing/creating. In sum, one could say, philosophers of education carry forward, in spite of their revolutionary credentials, 18th century attitudes toward truth, and an elitist class idea of most ordinary people as "non-creators". The largely attitudinal items from them on handling diversity indicate a nearly complete lack of actual experience handling such diversity, compared to this paper's sample of highly effective, creative, and high performing people and users of educated people outputs of society.

Managing Diversity, Love, Power, Money, and Failure (item 26 in this paper's model), referring to managing various market-determined values in life, contains most of the contents of the following items in the philosophers' model:

11, via people to emancipate people into diverse types of modernity
24, expand tolerance of religion to all diversity: ethnic citizenship to transnational civic society
27, instead of taking the 1 idea in 1 culture, blend several ideas from several cultures
28, mix and interact cultures, work between not within them, use blends of them not single "right" ones
39, doubt goodness of own ways, distinguish within own ways commendables from dross, like working with differences

Demystifying (item 6 in this paper's model) contains most of the contents of the following items in the philosophers' model:

5, liberated from various false consciousnesses
9, see how rebellion and dissent reproduce existing power
10, distinguish undistorted from manipulated interactions
12, recognize non-transparency: delusions in society & self/others, from escaping things too painful to face
16, truth, history, and science as strands of interpretation competing to dominate each other, not unitary: use incidental features to overthrow essential text meanings
17, govermentalization of selves, souls: power over others becomes power over self, then new power over other = spiral
18, spot differends: conflicts not resolvable because no rules apply to both sides
29, enculturate yourself then redescribe yourself undoing socialization effects
31, undo bias, specialization, presuppositions, performativity via self reflective self criticism
43, realize how we spend our lives fleeing our own freedom, undo identity aspects that reduce scope of world/action we respond to
45, are aware of what they denied in what they achieved, what ignored in what they attended to

Leaving Home (item 1 in this paper's model), Losing the Excuse of Background (item 2), and Determining Your Self (item 3) contain most of the contents of the following items in the philosophers' model:

1, invent themselves
13, self reflect: like psychoanalysis of self (psychic growth) of society (for emancipation)
21, open self to different ways to live, evolve own goals continually, overcome blocks to social/self growth

22, create own life as work of art, enlist others in shared goals
29, enculturate yourself then redescribe yourself undoing socialization effects
39, doubt goodness of own ways, distinguish within own ways commendables from dross, like working with differences
43, realize how we spend our lives fleeing our own freedom, undo identity aspects that reduce scope of world/action we respond to
47, develop all their possible abilities

These five items in this paper's model cover what 22 items in the philosophers' model cover (2 of them cover what 16 did). That means there are, at least, 17 items in this paper's model entirely missing from the philosophers' model. The question arises--why do philosophers of education emphasize diversity handling and mystification undoing so often and so much? The ideology of liberation--civil rights, gender liberation, handicapped liberation--and the ideologies of marxism--demystifying church, demystifying labor, demystifying government authority--underlie the above listed items. Philosophers of education are captured by ideologies that narrow their focus and reduce the scope of capabilities they look for, write about, and expect of highly educated-acting people. Furthermore, given the marxist liberationism cast to their thought, the oppression, powerlessness, and mystifications they lament in others, might actually be accurate descriptions of their own personal oppressing, powerlessness, and mystification experiences--most of them having lived their lives entirely within academia, where they lack experience of and actual use of power in lives of bandying ideas about. Why do they emphasize Leaving Home, Losing the Excuse of Background, and Determining Your Self so much? It is likely that it is not ideology but the nature of the topic itself that drives the presence of these items. As expected philosophers, seen below, are liberationists, while this paper's sample are liberals. All ideologies are apparently not created equal as it is hard to imagine any sample that would distribute "educated behavior" answers nearly equally across the six ideology types below.

Next Steps

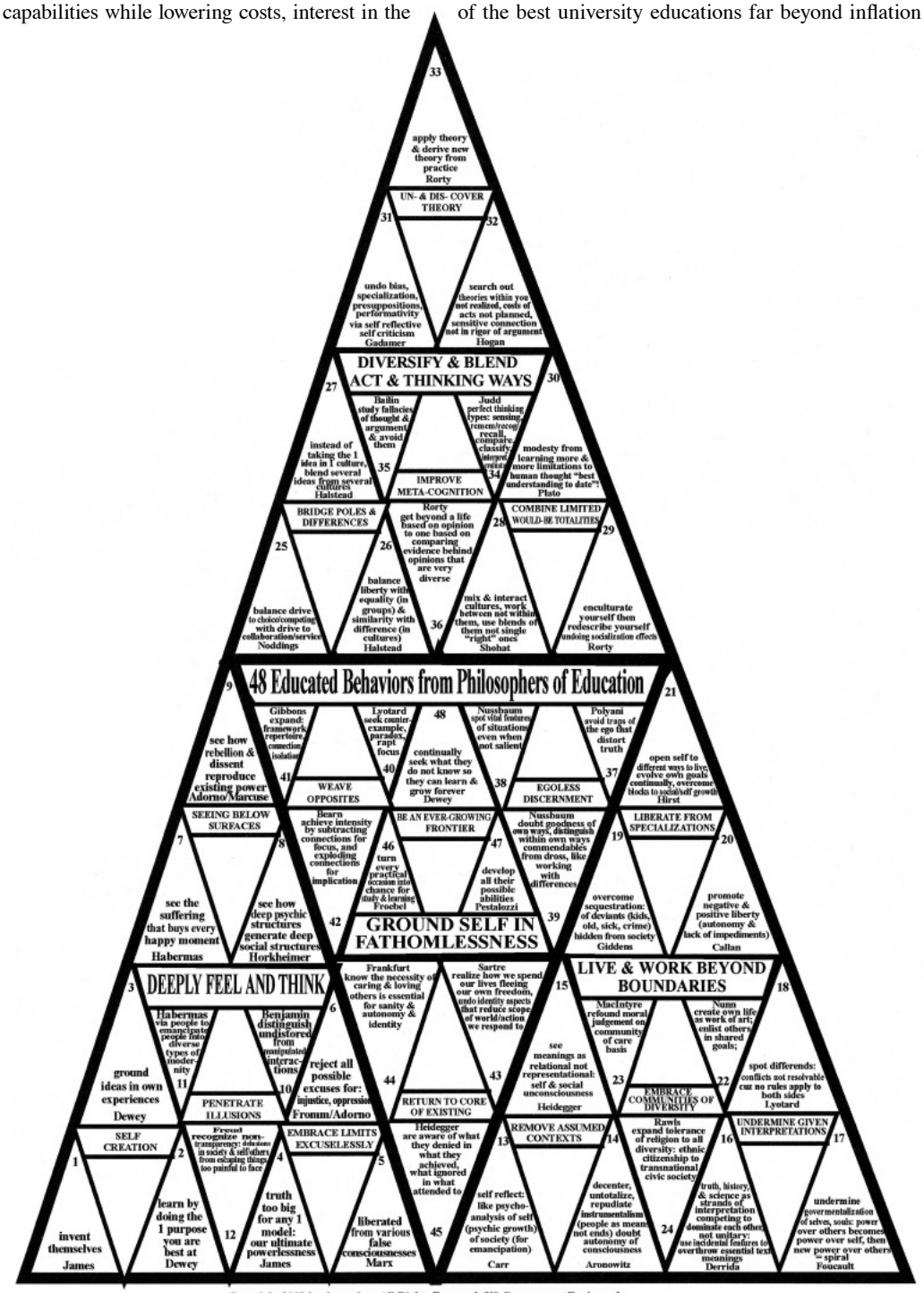
An assessment instrument was created that assesses the degree to which any person has achieved each of the 48 educatedness dimensions from this paper's research and the degree to which each of the 48 dimensions is supported or hindered by arrangements in and around particular organizations and workgroups. It has not, at this date, been applied to a sufficiently broad and representative sample of society, to produce results usable for research. A book with a simplified version of this assessment instrument, in a self assessment questionnaire format, is available from the author of this paper (contact by email, please: richardtgreene@alum.mit.edu). The book is used with corporate consulting clients and college undergraduates to assess current client degree of educatedness and based on that prescribe corrective actions for missing or weak dimensions of educatedness (all dimensions from this paper's model).

It is natural to want to measure particular institutions, educational arrangements, organizational forms with hidden or overt curricular effects on their members, to ascertain how "educating" they are in this paper's 48 terms. It is also natural to want to measure career outcomes, life satisfaction, career achievement, career creativity and see which of them in what ways, for particular people or types of people, link to which of this paper's 48 capabilities of highly educated-acting people. This is work for the future.

Quality certifications, such as the ISO 9000 and ISO 14000 series, from the European Union, have great financial power in industry and have spread world wide among over 144 nations. Should certain universities deliver graduates that they quality certify in each of the 48 capabilities of highly educated-acting people from this paper's research, industry and job markets may powerfully respond. A competition between "famous" universities and "quality certified over 48 dimensions of educatedness" ones might emerge and put pressure on imprecise status rankings of universities. One research option for the future is the development of university quality certification

Fundamental Educational Ideology Types		**Coverage by this paper's model**	**Coverage by philosophers' model**
fundamentalism	equip people for superior righteousness to current decrepit society	zero	zero
intellectualism	from opinion to evidence based reasoning	3	3
conservatism	equip people to prevent changes in society	zero	zero
liberalism	compete for success	37	6
liberationism	cohorts are critiques of society	3	36
anarchism	denationalize schooling	3	3

around this paper's model or a similarly developed one. Should certain universities compete with each other at maintaining the same quality certification across all 48 capabilities while lowering costs, interest in the public sector and among hard-pressed parents might ensue. This is an avenue worth public and private research investment, given the substantial rise in costs of the best university educations far beyond inflation



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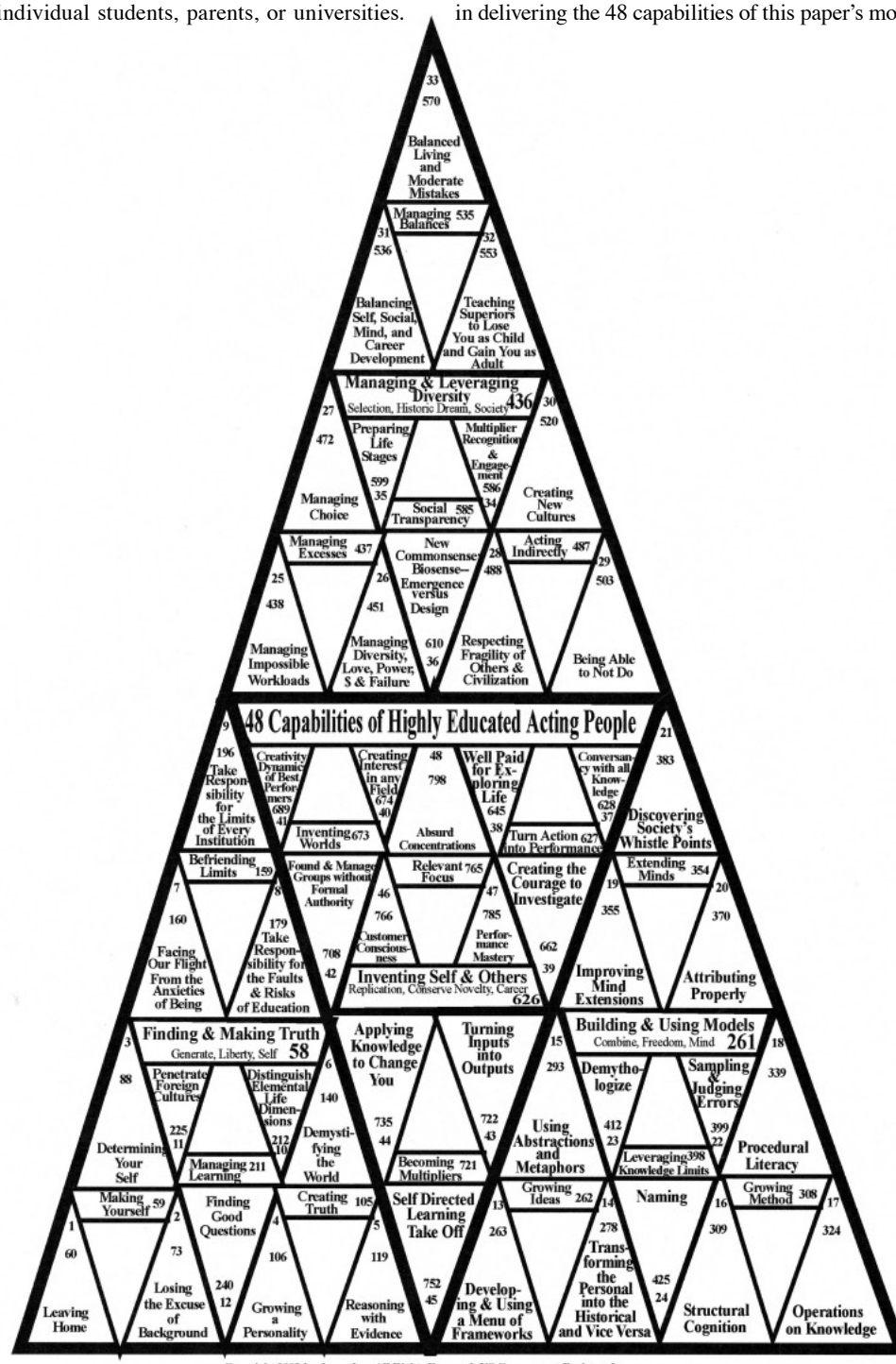
the apex number is the capability number (1 to 48)

over the past 30 years. It is a public policy issue, responsible for deeply reducing actual wealth of the middle class in industrial societies, not just a private issue of individual students, parents, or universities. Claims by new technologies to deliver "education" more cost effectively could be measured with respect to their ability to compete with traditional universities in delivering the 48 capabilities of this paper's model.



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the apex number is the capability number (1 to 48), the larger number in each triangle is the book page for that capability in Greene, 1998)

Educated Person Checklist (Copyright 2000 by the author)

48 Capabilities of Highly Educated-Acting People (Ordered for Distinguishing Items not by Similarity)	0=low 10=high educatedness
1. EDUCATION AS LEAVING HOME: "e" "duco" being led out from what your parents, local community, nation, and era believe	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
meeting other people, meeting other family types, meeting other nationalities, meeting the other genders, meeting other eras, meeting other professions and disciplines of knowledge experiencing history as the formal study of human mistakes; reading widely; learning to manage diversity	
2. EDUCATION AS SELF DETERMINATION: replacing those values and habits unconsciously absorbed while growing up with freely self-consciously chosen new ones	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
surveying current beliefs, finding the origin of current beliefs; assessing world shrinkage caused by your background factors experiencing radically unknown worlds; succeeding by criteria other than your own (personal and society's)	
3. EDUCATION AS DEMYSTIFICATION: finding power that we automatically give over our lives to institutions and retracting those gifts of power over our lives in favor of we exercising power over our own lives	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
surveying what convinces and impresses us greatly, finding the origin of that power revisiting the process by which we gave that power over our lives to external others and institutions seeing gaps between our true self interests and the interests of those institutions and others promoting themselves as sharing or working in our interests	
4. EDUCATION AS EVIDENCE BASED REASONING: replacing casual opinion formation from folk intelligence of daily life with evidence based reasoning as the basis of opinion formation	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
experiencing the horror of operating based on personal opinion; experiencing the liberation of being freed from operating based on opinion learning what kinds of evidence produce the most truth; learning to compare different types of evidence to arrive at truth judgements	
5. EDUCATION AS PERSONALITY GROWTH: replacing a person who "is" his opinions, you attack his opinions you attack his self, with a person who "has" opinions, you attack his opinions he considers changing them, knowing his present opinions are limited, transitory, provisional commitments that will be upgraded continuously as life provides new data	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning how what we depend on for security and anxiety management hurts our lives and the lives of those around us learning how we think we are something that really we can learn to have not be learning to let go of part of our selves so we flexibly manage what we used to inflexibly defend and depend on	
6. EDUCATION AS FACING OUR FLIGHT FROM THE ANXIETIES OF BEING: learning how who we have become deliberately blocks off major parts of life and work from us in order to create a world smaller and safer than the real world we are actually in; learning how to face the absurdity, arbitrariness, and responsibility of the free project our lives are, honestly, without shrinking our world into something tiny enough to feel safe in	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
facing the absurdity of the here and now, facing the mystery of why we exist, facing the failure of anything outside ourselves to give meaning to our lives facing the dread of being responsible for consequences though we do not have the power to anticipate or control the consequences of our actions	
7. EDUCATION AS LOSING THE EXCUSE OF BACKGROUND: making a person who, when asked any question, from the answer, you cannot guess what gender, age, nationality, profession, or background they are from; processing in their mind makes their current beliefs not simple repetitions of the environments they grew up in	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning the stance of committed provisional relativism; practicing being moral by thinking our situations rather than blindly following standards or rules of others outgrowing authoritarian habits, outgrowing libertarian habits, outgrowing Hamlet's delay; moral choice as right versus right not right versus wrong	
8. EDUCATION AS LEARNING TO MANAGE IMPOSSIBLE WORKLOADS: when students are put in the situation that following exactly what each professor of each course requires, would result in impossible levels of work, students must interpret professor intent and choose wise ways of compromising among assignments	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
grasping the intent beneath assignments; confirming with busy professors, learning how to get their time; learning to combine separate papers and assignments into fewer, deeper efforts; learning how to manage time wisely; learning when more effort is useless; learning when to job switch	
9. EDUCATION AS TURNING INPUTS INTO OUTPUTS: turning every experience and personal learning into a tangible product that others can benefit from	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning to invent improvements; learning to test our inventions with real application experiments; learning to publish our good deeds learning to teach others from our publishings	
10. EDUCATION AS LEARNING TO CHOOSE: learning to choose by learning that choosing one possibility means dying to 99 other possibilities not chosen; people who can choose in life are people who can say goodbye to routes not chosen, happily facing and managing the limited resources of life	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning the pain of choice; practicing the pain of choice learning to conduct funeral services for the lives we chose not to have; learning to celebrate the uniqueness of the path we chose	
11. EDUCATION AS OPERATIONS ON KNOWLEDGE: learning not knowledge itself but operations to perform on knowledge in order to generate it, combine it, select it, and apply it;	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
logical and evidentiary operations; metaphor operations; categorical, causal, simulation models; fusion and subdivision research; literature reviews; data set development and analysis;	
12. EDUCATION AS STRUCTURAL COGNITION: operating not merely on factual knowledge but operating on the structure of such knowledge	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
structural inputs: reading, listening; structural outputs: writing, speaking fractal concept modeling	
13. EDUCATION AS PROCEDURAL KNOWLEDGE: developing procedural capability from the knowledge we already know	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
compiling facts into procedures; compiling procedures into actual impacts; packaging proposals for social acceptance organizing coalitions	
14. EDUCATION AS CONVERSANCY WITH ALL OF KNOWLEDGE: developing techniques and confidence to read anything however expert, hard, or challenging and developing a taste for learning in nearly all human fields; exposure to and mastery of the tools unique to your era regardless of what field invented them	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
the ability to read anything at all via multi-pass reading; grounding points library browsing and copying; computing, virtuality, cyberworld, gaming, simulating, programming skills	

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48 Capabilities of Highly Educated-Acting People (Ordered for Distinguishing Items not by Similarity)	0=low 10=high educatedness
15. EDUCATION AS BEING PAID WELL FOR EXPLORING WHAT TO DO WITH OUR LIVES: exploring what to be and do by investing seriously in a few well chosen alternatives rather than aimless drifting, so we get paid well and develop a track record of accomplishment while exploring what life and we have to offer each other	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
choosing three baby fields that will be very much more important ten to twenty years later investing 3 or 4 years in each baby field, enough to meet key people and make a contribution for developing a track record of accomplishment	
16. EDUCATION AS MANAGING LOVE, POWER DIFFERENCES, AND FAILURE: experiencing loss of love, inferiority to authority, and defeat in your own goals and learning how to manage your emotional responses to them	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
response stopping and substitution; development of a personal philosophy of being developing sense of self worth independent of social supports	
17. EDUCATION AS LEARNING HOW NOT TO DO: coming to terms with the impetuousness of youth and its overweening desire to do something impressive to make one's place in the world early as a young person	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
the ecology of personal change; the power of detachment; disciplines of meditation; the perserverence of creative efforts and career development; self management of stress	
18. EDUCATION AS TAKING RESPONSIBILITY FOR THE RISKS AND HARMS OF BEING EDUCATED: acknowledging the risks and harms of education and taking personal responsibility for compensating for them	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
education as inculcating the habit of inputting and sitting, stripping lives of the habit of action, impact, and care for others education as drive reducer by making people satisfied with less accomplishment college as unnatural community of only young people, cut off from mixing with people ten, twenty, and more years older confusing thinking new thoughts with achieving personal change; developing life-threatening lifestyle in terms of poor sleep, eating, and sex habits compensating for instructors inappropriately applying lecturing 400 years after printing presses made it an ineffectual way of transmitting knowledge	
19. EDUCATION AS TAKING RESPONSIBILITY FOR THE SHORTCOMINGS OF ANY INSTITUTION YOU ARE ASSOCIATED WITH: instead of bitching about the shortcomings, learning to personally compensate for them and find whatever real values the institution can provide	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
mapping the faults of your particular institution; mapping the faults of the higher education strategies and services your nation provides mapping the resources your institution affords you with; mapping the resources that higher education in your nation provides learning where in the world the best educational resources are; learning how to get personal access to those best-in-world resources measuring your degree of utilization of your institution's benefits; measuring your degree of compensation for your institution's faults	
20. EDUCATION AS REVERENCE AND RESPECT FOR THE FRAGILITY OF OTHER PEOPLE AND CIVILIZATION: coming to understand how hard life itself basically is and how its difficulties wear people down till they function poorly for self and others; learning the gradual accumulation that civilizations are of ways to support people with handling the difficulties of life	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning how easily other people can be put into despair; learning how fragile students are in self confidence terms learning how to handle such fragile beings; learning to restrain your own tendencies to over-demand things of others; learning to respect the fragility of life and manage it well	
21. EDUCATION AS ABILITY TO CREATE NEW CULTURES FROM SCRATCH: in the vacuum of being away from home, without social support, at college, learning to create your own values, lifestyle, sources of daily happiness, and resources for work intensification	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
learning to function in a social vacuum; learning to initiate valued activities; learning to build informal communities around you; learning to entertain others; learning to entertain yourself when alone; learning to find valuable activities; learning to explore environmental possibilities and threats	
22. EDUCATION AS BALANCE AMONG SELF DEVELOPMENT, SOCIAL DEVELOPMENT, INTELLECTUAL (MIND) DEVELOPMENT, AND CAREER DEVELOPMENT: managing the trade-offs among these types of development and intending the imbalances among them actually achieved	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
self development; social development intellectual (mind) development; career development	
23. EDUCATION AS TEACHING PARENTS HOW TO LOSE YOU AS A CHILD AND GAIN YOU AS A PEER: in effect most students in college have a crisis wherein they destroy their parents efforts to continue relating to them as a child and they start parents on the road towards relating to their children as peers	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
liberation from parental ideas, styles, values, supports, and authority; free engagement with other significant adults taking you beyond your parents' ways of being rapprochement with your parents to the extent they change into treating you less as a dependent to be commanded and more as a peer to be respected	
24. EDUCATION AS LEARNING TO APPLY KNOWLEDGE REGULARLY TO CHANGE YOUR OWN LIFE: developing the habit of breaking your habits and updating them based on reading, research, and searches you do to uncover how best to live aspects of your life	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
measuring the degree to which you know things you do not apply to yourself measuring the degree to which you opine things to other that you fail to embody yourself; practicing regular research-result-driven personal change	
25. EDUCATION AS DEVELOPING AND APPLYING A MENU OF FRAMEWORKS FOR ELUCIDATING UNOBVIOUS ASPECTS OF ANY PROBLEM OR OPPORTUNITY: learning to view things abstractly so as to foster innovation and eliminate the redundant efforts of staying at the level of concrete phenomena	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
thinking metaphorically; mapping metaphors; failure indexing; learning to abstract ideas from concrete cases learning to apply abstract frameworks to concrete cases; learning to spot similarities and differences among cases	
26. EDUCATION AS TRANSFORMING THE PERSONAL INTO THE HISTORICAL AND VICE VERSA: learning that most of the sufferings you and your family endured came not from personal failings but large scale historical, sociological, and anthropological forces that millions of others endured with you	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
seeing personal aspects of you shared by millions of others; seeing forces in your era that caused you and your parents to live the way you did seeing the blindness of yourself and others to the forces that actually largely determine the conditions and aspirations of your lives seeing the way when and where you were born parameterizes your life's possibilities and limits	

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27. EDUCATION AS LEARNING THE CREATIVITY DYNAMICS THAT PRODUCED THE WORLD'S BEST LIVES, PEOPLE, AND ACCOMPLISHMENTS: learning how the mind and heart work in general and in the particular lives that most benefitted you and the world; spotting phony leadership and distinguishing it from real leading	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
finding a mentor; doing research under direction of a master; making social contacts with accomplished people; studying how the mind works; deliberate development of new personal habits designed to make you more creative than you now are; developing awe at the human ability to redesign life and the universe; experiencing one or more high performance groups; experiencing one or more high performance trance-like "flow" periods in your own life	
28. EDUCATION AS DEVELOPING THE ABSTRACTIONS AND METAPHORS THAT GIVE ACTION ITS LEVERAGE: learning the whistle points of your own and other societies; comfort handling abstractions; learn metaphors allowing you to say anything in any context safely and impactfully	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
seeing how abstractions like "social status" cause things in life; learning how to abstract similarities and differences from concrete cases: mapping metaphor parts onto an issue to elaborate it using ideas from a different domain; breaking home and community prejudices and disparagements of abstractions and metaphors as ways of thought	
29. EDUCATION AS ABILITY TO MAKE ONESELF INTERESTED IN NEW, DIFFICULT, OR IMPORTANT THINGS: breaking your slavery to personal interests; learning to grow better quality interests; learning how to develop interest in difficult, new, or unknown important things; deciphering people by discerning the structure and origin/destiny of their interests	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
legitimating to self and others peripheral participation in communities of practice; finding the world's best someone and finagling a way to get close to them in daily work; multi-pass exposure till difficulty, strangeness, meaninglessness soften and disappear; self diagnosing personal lack of confidence caused disinterest in important aspects of the world; multiplier shyness	
30. EDUCATION AS ABILITY TO FOUND OR MANAGE GROUPS WITHOUT FORMAL LEADERSHIP POSITION OR AUTHORITY, INVISIBLY: observing groups at work; spotting effective and ineffective interventions in group dynamics; sloughing egoistic leadership impulses in self and others; turning others into leaders	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
raising the confidence level of others; helping others to invent, play, and mesh roles with others; using others' ideas to support your own;	
31. EDUCATION AS BALANCED LIVING AND MODERATE MISTAKES: balancing detachment and engagement, input and output, global and local, abstract and concrete, visible and invisible; public and private, work and home, life and death, self and others; learning to make deniable, recoverable mistakes; learning enemy-less modes of disagreement and detachment	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
distinguishing what bridges to burn behind you and which to avoid burning; spotting your own and others' overemphases; next career steps chosen to challenge your greatest weakness versus chosen to build on your greatest strength; practice rebounding from mistakes;	
32. EDUCATION AS COURAGE TO INVESTIGATE THE WORLD'S BEST PEOPLE AND PLACES ON YOUR OWN AUTHORITY: fearing no person; practicing and developing boldness; willingness to phone any person however famous; leaning how to access famous people	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
developing the habit of meeting the most creative people in the society around you, wherever you are; the skills of getting access to protected or famous people; reading people's interests and green and red flags; preparing convincing stories of who you are and what you want	
33. EDUCATION AS SELF-DIRECTED LEARNING TAKE-OFF: discovering that you do not need college in order to study and learn, even the most difficult and important things	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
weekly copying of articles; subsequent readings to fill voids in earlier ones; articles marked; categorical models built; reading searches to fill model gaps	
34. EDUCATION AS IMPROVING YOUR MIND EXTENSIONS, NOT BRAIN: improving your mind extensions not just brain performance	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
personal professional library; personal file system; reminding system; cognitive friend network; cognitive furniture; cognitive architecture, cognitive apparel	
35. EDUCATION AS PROPER ATTRIBUTION--METICULOUSLY GIVING CREDIT TO OTHERS: ruthlessly not exaggerating the uniqueness of your own thoughts and inventions but thoroughly seeing how they arose from dialog with and borrowing of insights of others	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
proper attribution to yourself of how much of your ideas comes from others' ideas; proper attribution to others of how much of your ideas comes from others' ideas shutting down the childish desire to take personal credit for richness in your environment that you use	
36. EDUCATION AS LEARNING WHAT SOCIETY'S WHISTLE POINTS ARE: learning the points where small actions have large whole-system changing effects	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
social process, org learning, creativity dynamics, culture dynamics, and other fractal models used for finding whistlepoints; non-linear system dynamics; avalanche events	
37. EDUCATION AS DISTINGUISHING ELEMENTAL LIFE DIMENSIONS: discovering sets of abstract concepts that constitute life for you unconsciously; replacing them with concept sets you design; distinguishing aspects of life with thoughts and deeds	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
competing life dimension sets; discriminating behaviors; three relations to time: timeless sung labor, immortal worlds of works, the surprise environment established by acting	
38. EDUCATION AS PENETRATING FOREIGN CULTURES: learning to spot foreign cultures, deliberate experiments to probe frameworks of interpretation; strategic uses of differences; culture types	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
the attachments/engagement spiral; the monolithic culture myth; dimensions of culture measurement; spotting culture evolution dynamics	
39. EDUCATION AS FINDING GOOD QUESTIONS: accounting for action audiences, searching for sources of leverage; root problems; problem generators	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
spotting unwitting trends among competitors; detecting problem category structure; neuroses caused interest blind spots; realism checks	
40. EDUCATION AS COMPENSATING FOR SAMPLING AND JUDGEMENT BIASES: knowing the human knowing machinery well enough to not be fooled by how our minds misread the world and how our emotions misreact to the world	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
mastering how bad minded people tilt data to bias it towards their favorite positions; detecting such tilting; detecting your own mind's judgement biases; correcting for you own mind's causal attribution exaggerations	

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41. EDUCATION AS DEMYTHOLOGIZING SYMBOL SYSTEMS: avoiding magical interpretations of symbols and tracking symbols back to the human consciousness phenomena that gave rise to them; undoing over-literalness in historic myth systems	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
translating myth statements into "human consciousness is" statements; correcting magical attributions in over-literal cultures generated for the benefits of elites; preserving respect of human spirituality from distortions in historic religions and cults	
42. EDUCATION AS NAMING SKILL: developing the ability to invent names that compress much impression and experience and information into memorable short statements; developing systems of names that discriminate subtle differences in similar seeming concepts	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
representational principle of naming; relational principle of naming; associational principle of naming;	
43. EDUCATION AS MULTIPLIER RECOGNITION AND ENGAGEMENT: identifying each society's multipliers of individual works, getting your works multiplied, using not fighting social proclivities	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
fostering immigrant consciousness; historical competitive interests of societies; world's highest taste markets; mapping multiplier access paths	
44. EDUCATION AS PREPARING FOR LIFE'S STAGES: contents of immediate lifestyle and work coming from needs of later stages of one's life; anticipation of future changes in career dynamics and environments now through concrete preparatory actions	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
age appropriate work contents prepared; growth in personal social recognition and power anticipated in present work contents; present opportunities used for both immediate and long range later life stage resource development; lifelong friend network community establishment and management	
45. EDUCATION AS A NEW COMMONSENSE--BIOSENSE--EMERGENCE VERSUS DESIGN: origin of human institutions without plan, intention, or design via self organizing processes; complexity tampering as interventions at higher scales where problems appear that ignore generative forces from lower basic units levels	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
self-organizing systems; edges of chaos; non-linear system dynamics; butterfly effect; avalanche effect; fractal effect; evolution rather than design; self organization rather than design; evolutionary engineering;	
46. EDUCATION AS CUSTOMER AND MARKET CONSCIOUSNESS: in every situation detecting who the customers are, what their requirements are, and how well your outputs are satisfying them	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
knowing the dimension of anything that independently satisfy customers; knowing all the customers of any output; detecting outputs that go unused by anyone; detecting inarticulate customer wants	
47. EDUCATION AS PERFORMANCE MASTERY & LIVING YOUR DREAM: practicing till your speeches and actions become polished, attractive performances; polishing the processes by which you live and work till you shine with continuous improvement and regular leaps of innovation	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
public speaking four year circuit; detecting audience needs indirectly; tuning processes till outputs please customers; detecting your ultimate dreams for your life and undoing regular misrouting of your life away from them; polishing side interests into major life dream performances; absolutely transporting audiences into ecstatic consciousness	
48. EDUCATION AS ABSURD CONCENTRATIONS: taking every aspect of your interests, habits, and life to ridiculous extremes; driving any activity or hobby until it attracts worldwide attention due to the absurd depth and breadth you achieve with it	0..1..2..3..4..5..6..7..8..9..10 not true of me true of me
recognizing the difficulty of gathering attention; recognizing the worth of sheer attention; building all personal activities into attention gathering mechanisms for the rest of your life; practicing carrying everything to intense perfection; unlocking the imaginative frontier within any mundane activity in life	

Finding and Making Truth		
Making Yourself		
Leaving Home	Losing the Excuse of Background	Determining Your Self
Creating Truth		
Growing a Personality	Reasoning with Evidence	Demystifying the World
Befriending Limits		
Facing Our Flight from the Anxieties of Being	Take Responsibility for Faults/Risks of Education	Take Responsibility for Limitations of All Institutions
Learning Management		
Distinguishing Labor, Work, and Action	Penetrating Foreign Cultures	Finding Good Questions
Building and Using Models		
Growing Ideas		
Developing and Using a Menu of Frameworks	Transforming the Personal into the Historical	Using Abstractions and Metaphor
Growing Method		
Structural Cognition	Operations on Knowledge	Procedural Literacy
Extending Minds		
Improving Mind Extensions	Attributing Properly	Discovering Society's Whistle Points
Leveraging Knowledge Limits		
Handling Sampling and Judging Errors	Demythologization	Naming

Managing and Leveraging Diversity		
Managing Excesses		
Managing Impossible Workloads	Managing Love, Power, and Failure	Managing Choice
Acting Indirectly		
Respecting Fragility of Others & Civilization	Being Able to Not Do	Creating New Cultures
Managing Balances		
Balancing Self, Social, Mind, & Career Development	Teaching Parents to Lose Children & Gain Adults	Balanced Living and Moderate Mistakes
Social Transparency		
Multiplier Recognition	Preparing Life Stages	Biosense: Emergence versus Design
Inventing Self and Others		
Turning Action into Performance		
Conversancy with All of Knowledge	Being Well Paid for Exploring Life	Creating the Courage to Investigate
Inventing Worlds		
Creating Interest in Any field	Learning Creativity Dynamics of Best Performers	Founding/Managing Groups without Formal Position
Becoming Multipliers		
Turning Inputs into Outputs	Applying Knowledge to Change You	Self Directed Learning Take-Off
Relevant Focus		
Customer Consciousness	Performance Mastery & Living Your Dream	Absurd Concentrations

References:

Adorno, The Jargon of Authenticity, Routledge, 1986

Anderson, Imagined Communities, Reflections on Nationalism, Verso, 1983

Arendt, The Human Condition, Univ. of Chicago, 1958

Arendt, Between Past and Future, Penguin, 1993

Aronowitz and Giroux, Postmodern Education, University of Minnesota Press, 1991

Benjamin, 1939, The saber-tooth curriculum, in Golby, Greenwald, West, eds., Curriculum Design, Open Univ. Press, 1975

Bok, Higher Learning, Harvard, 1989

Brown and Duguid, The Social Life of Information, Harvard Business School, 2000

Callan, Creating Citizens, Clarendon Press, 1997

Carr, Education, Knowledge and Truth, Routledge, 1998

Cole, Dale, Kano, editors, Handbook of Total Quality Management, Blackwell, 2004

Derrida, Politics of Friendship, translated by Collins, Verso Books, 1997

Dewey, The Complete Works: Early, Middle, Later, Southern Illinois University Press, 1930

Dhillon and Standish, editors, Lyotard: Just Education, Routledge, 2000

Ericcson and Smith, Toward a General Theory of Expertise, Cambridge, 1991

Frankfurt, Necessity, Volition, and Love, Cambridge, 1999

Gadamer, Philosophical Hermeneutics, translated by Linge, University of California Press, 1977

Gay, editor, The Freud Reader, Norton, 1989

Geertz, Local Knowledge, Basic Books, 1983

Gibbons, Limoges, Nowotny, Schwartzman, Scott, Trow, The New Production of Knowledge, Sage, 1994

Giddens, Modernity and Self-Identity, Polity Press, 1991

Greene, Are You Educated?, self published, 1999

Greene, Are You Creative? 60 Models, self published, 2003

Greene, Are You Creative? 128 Steps, self published, 2002

Greene, Are You Effective? Towards Procedural Literacy--100 Methods Everyone Should Know, self published, 1999

Greene, Global Quality, ASQC and Business One Irwin (now McGraw Hill), 1993

Greene, Managing Complex Adaptive Systems, self published, 2000

Greene, Art Power: Weaponizing Art, Wielding It in Business and Government, forth coming, 2004

Greene, Dimensions of Management, forth coming, 2004

James, Writings 1878-1899, The Library of America, 1992

Habermas, Between Facts and Norms, Polity Press, 1998

Halstead and Tayler, editors, Values in Education and Education in Values, Falmer Press, 1996

Hirst, Knowledge and the Curriculum, Routledge, 1974

Heidegger, Being and Time, translated by Macquarrie and Robinson, Harper & Row, 1962

Hogan, The Custody and Courtship of Experience, Colomba Press, 1995

Horkheimer and Adorno, Dialectic of Enlightenment, Continuum, 1991

Kegan, In Over Our Heads, Harvard, 1994

Lyotard, Lessons on the Analytic of the Sublime, translated by Rottenberg, Stanford University Press, 1994

MacIntyre, After Virtue: A Study in Moral Theory, Univ. of Notre Dame Press, 1981

Marcuse, One-Dimensional Man, Beacon Press, 1964

Marx, The Early Works, Basic Books, 1980

Ninn, Education: Its Data and First Principles, Arnold, 1945
Noddings, A Sympathetic Alternative to Character Education, Teachers College Press, 2001
Nussbaum, Cultivating Humanity, Harvard, 1997
O'Neill, Educational Ideologies, Goodyear Publishing, Santa Monica CA, 1981
Plato, The Dialogues of Plato, 2 volumes, translated by Jowett, Random House, 1937
Polanyi, Personal Knowledge, Harper, 1964
Rabinow, editor, The Foucault Reader, Pantheon, 1984
Rawls, Political Liberalism, Columbia Univ. Press, 1993
Rorty, Philosophy and Social Hope, Penguin, 1999
Russell and Norvig, Artificial Intelligence, Prentice Hall, 2003
Sartre, Being and Nothingness, translated by Barnes, Methuen, 1957
Shohat, American Citizenship: The Quest for Inclusion, Harvard, 1995
Sternberg, Handbook of Creativity, Cambridge, 1999
Tannen, The Argument Culture, Ballentine, 1998
Tsagarousianou et al, Cyberdemocracy, Routledge, 1998