

The Professional Development Institute PDI Inc. Architects of Harvard University Global System™

How to Excel in Leadership, Innovation & Competitive Performance 1-800-HARVARD • +1 819-772-7777 • www.eharvard.org

About Us

Our Mission

We are a global leader in the creation and delivery of learning solutions, skills-development services and patented and proprietary instruments to excel in leadership, innovation, performance and competitiveness in a turbulent environment. These practical instruments form the Harvard University Global SystemTM described below.

Our mission is twofold:

- 1. Coaching and providing leaders with impartial expert advice;
- 2. Empowering decision-makers and other professionals at all levels with proven team-leadership skills, universal competencies and practical instruments to excel as exemplary high achievers.

By "universal", we mean the cutting-edge and competitive competencies, skills and best practices essential for today's executives, entrepreneurs, managers at all levels, executive assistants and other professionals, regardless of their functional domain (IT, finance, engineering, R&D, intelligence, production, human resources, health, procurement, marketing and sales). These universal competencies include self-leadership and exemplary team leadership, innovation skills, project management, risk, time management, finance and communication skills including principled negotiation and writing and presentation skills. They not only complement but facilitate the mastery of the technical skills specific to your job.

Tailoring in-house sessions to client needs is among our distinctive strengths.

Home page: www.eharvard.org

Vision: www.eharvard.org/info/PDI-Vision.pdf including illustrations of progress

Advisory Board: www.eharvard.org/info/aboutpdi.asp

Our Vision

Our vision is to democratize exemplary-leadership and management education worldwide and build talent, by pushing the boundaries of innovation and complexity reduction in decision-making.

See the next pages for illustrations of our vision at work

Products and Services

- 1. Professional Development Seminars, both public and in-enterprise: <u>Exemplary Team Leadership & Management Skills</u>, <u>Professionals</u>, <u>Risk & Project Management</u>.
- 2. Flagship innovation suite: Harvard University Global SystemTM (HUGS)
- 3. Patented time saver with unparalleled space management: Harvard® Planner
- 4. Upcoming Harvard® software suite to support teamwork in innovation and complexity reduction, negotiation planning and progress tracking, responsibility/accountability charting, risk mitigation, project management (scoping, scheduling, progress reporting) and time management. Up to-date investment amounts to \$3.3 million, including \$1.7 million in upstream research approved for tax credits under the Federal Government's Scientific Research & Experimental Development (SR&ED), as certified by this PriceWaterhousCooper's letter.
- Ad-hoc coaching and management consulting in leadership, innovation, complexity reduction, strategy
 formulation, strategic intelligence, project and risk management, performance evaluation, productivity and
 sustainability improvement, career and life planning.



The Professional Development Institute PDI Inc. Architects of Harvard University Global System™

How to Excel in Leadership, Innovation & Competitive Performance 1-800-HARVARD • +1 819-772-7777 • www.eharvard.org

Illustrations of Our Vision to Democratize Cutting-Edge Leadership Education and Build Talent with a High Innovation Quality, Capacity and Agility

Alain Paul Martin

Our work focuses on improving performance through exemplary leadership and innovation is proving to be not only invaluable to enhance the performance of high achievers but equally beneficial to professionals suffering from underemployment or unemployment, both due to deficits in **universal skills**. Ubiquitous in most firms, underemployment may breed low wages, crushing debts and a loss of dignity. It also erodes competitiveness and harms local and national economies.

Universal skills and tools are as vital for sustainable jobs and upward mobility in today's global workplace, as the multiplication was prior to the industrial revolution when enlightened European leaders introduced innovations to primary schools such as *the long multiplication* and *the grid method*. Similar innovations are overdue to bring to high schools competencies applicable across professions such as project management, self-leadership, financial and digital literacies, negotiation, innovation and writing and presentation skills. Alas, these competencies are mostly taught in colleges, just as the multiplication was learned in high-schools in the pre-Napoleon era.



© 2016 The Innovation & Complexity Reduction Lab

First Component of our Vision: Improve Competitiveness and Inclusion with Cutting-Edge Learning Solutions and Complexity-Reduction Innovations

Our research on innovation and complexity reduction, that began with my MIT and Harvard-University peers, is among initiatives proven to increase competitiveness by improving the performance of knowledge workers and bringing dignity to those underemployed and frequently alienated. Below are two illustrations.

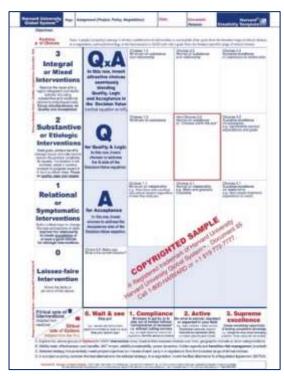
1. With the collaboration of Skanska (a global leader in engineering and construction) and Desjardins (the world's second strongest bank according to Bloomberg), we have applied Harvard University Global System'sTM (HUGS) framework¹ to tap into the potential of every project-team member, including support staff, construction foremen and others at the bottom of the corporate pyramid, both in the mundane and cutting-edge complex elements of project management (PM), from building multiple critical paths and calculating free floats and tied slacks to allocating scarce resources; all without math formulas. In a 2-day hands-on workshop, the participants learned the framework and produced operational plans of a complex project under multiple scenarios of uncertainty, normally assigned to M.Sc. Project-Management students. The deliverables (schedule, cash flow, earned-value and contingency plans, and progress-control simulations with the current status and new projections) were produced in a shorter time and of higher quality than those obtained with widely-taught methods in the PM certification courses.

Furthermore, with a nomenclature of six signs that are easily understood, memorized (mnemonically sound) and recognized worldwide, users were also able to communicate, without speaking each other language, both the project plans and progress reports, between Skanska's staff in Stockholm and field teams in Saudi Arabia and Peru.

Universal-skills' education must complement the job-specific apprenticeships (as in Germany) and the job-creation policies ranging from tax credits to employment subsidies. If synchronized, they can lift the lives of millions.

2. On brainstorming-excellence skills, we researched different ways of thinking and developed the Harvard® Creativity Template, among other practical tools, supported by a framework to boost and nurture innovation capacity, quality and agility, both upstream in the incubation, design and prototyping of products and services, and downstream in production, procurement, marketing and sales. We focus on the creative tools for sustainable team innovation and productivity, notwithstanding the importance of other determinants of competitiveness (risk appetite, business clusters, infrastructure and availability of risk capital).

The **Harvard®** Creativity Template and innovation framework help you weave innovation into everything you do to fulfill your mission by organizing your creative thought and breaking down the barriers to creativity, at each step of a negotiation or a project. The framework builds on proven creativity techniques². Used alone or with your favorite brainstorming method³, it will add value to your thinking process, permitting your team to capture hidden opportunities, including lessons from failures, and produce bold yet practical "out-of-the-box" options with less guesswork.



Harvard® Creativity Template

Users include CEOs, entrepreneurs, strategists, team leaders, intelligence and risk analysts, negotiators, auditors, engineers, project managers, executive assistants and other professionals in research, finance, marketing, sales, health, human resources, communications, procurement and production. As an example, in negotiation and conflict resolution, the Harvard® Creativity Template also helps negotiators, mediators and arbitrators seed, incubate and explore a complete panorama of options for mutual gains and deliverables. It widens the window through which opportunities and trade-offs are viewed. Even when the strategy is clear, its execution can be fraught with perils. That is why the Template provides a step-by-step scenario to build a critical mass for the change, reduce implementation risks, turn resistance to change into a constructive engagement, and mitigate residual risks and collateral damage.

Whether you are a CEO, a team leader or an executive assistant, you will maintain a strong mission focus, save time, innovate and perform better with the Harvard® Creativity Template and HUGS decision aids. You will tackle the fear of uncertainty, chaos and inaction with a greater confidence and reduce the risk of trial-and-error bootstrapping that leaves out important considerations in decision-making and policy formulation.

These examples illustrate the significant pay-off of cutting-edge leadership education and HUGS instruments focusing on universal skills and tools. Built on innovation and complexity reduction, these instruments enhance competitiveness not only by improving the performance of high achievers, but also by contributing, in an unprecedented way, to inclusion in addressing underemployment and unemployment due to serious universal skills' deficits.

Second Component of Our Vision: Bringing Cutting-Edge Universal Skills to the K-12 Classrooms Across the Public and Private Education Systems

Having demonstrated the impact of universal-skills' innovations in the market place, it is reasonable to explore going further upstream to help primary and high-school youth excel in these vital competencies which provide a competitive advantage in college and are invaluable in the emerging workplace, regardless of the profession.

The leading education experts and policy-makers we met agreed that the goal to bring the universal skills and toolkit is commendable and overdue. They however warned about the daunting challenges to be expected during execution,

especially in the United States and Canada where each of 15,000 school boards has a veto on the curriculum, unlike the rest of the world where the task is led by a single national authority namely the Department of Education. In Finland,

Korea and other countries with a consistently strong PISA scores and low unemployment, the national government manages and regulates the core curriculum, which is the product of wide consultations and collaborative effort. Continuous experimentation with innovative learning solutions is an integral part of the portfolio of activities

Rather than investing years in seeking the buy-in of most school boards through a "push strategy", a MIT director, who is convinced of the merit of our framework, proposed a "pull strategy" to convince Ivy-League colleges to make universal skills a pre-requisite for entering undergraduate studies while simultaneously helping a critical mass of progressive school boards to educate their students in these skills. For the domino effect to occur, education and teacher colleges must excel in the new teaching approach of universal skills through complexity reduction.

On specifics, we know from experience that it is not early to endow Kindergarten children with rudiments of project management, such as task conceptualization, sequencing, time estimating of individual tasks and total project spantime determination with analogs (Lego cubes) instead of arithmetical calculations.

Focusing on playful hands-on collaborative teamwork and games, we have experimented in:

- Kindergarten, with breakfast as a project encompassing tasks (heating the water, mixing it with oatmeal, eating and washing the dishes) and experiencing empathy for the parents who have no option but to wash the dishes by hand versus those endowed with multiple options. The pupils determined the total span time by posting Legos (each representing a minute on a scheduling grid) and compared it with the allocated time for breakfast (deadline). They also were able to observe the total span-time of various options such as washing the dishes by hand versus a dishwasher; and the pro and cons of time acceleration such as eating faster.
- Third and Fourth Grades, with the video production of a puppet show, a project with human-resource allocation issues, scarce resources (two cameras), multiple critical paths, deadlines, a budget and the importance of teamwork (borrowing from sports), leadership and fundamental ethics.

Students in Grades 5 and 6 will experiment with (a) goal setting and validity testing; (b) team-synergy games where collaboration yields greater benefits than inappropriate competition; (c) project scheduling, resource allocation and budgeting under increasing uncertainty and risk; (d) self-leadership, building on the work Astronaut Mike Mullane.

For Grades 7, 8 and 9, we address (a) mission and priority-setting fundamentals; (b) work breakdown structure; (c) risk mitigation; (d) slack composition: free and tied floats; (e) budgeting versus commitment and cash flow planning; (f) team-building and strength deployment for innovation under conflict; (g) basic negotiation skills; (h) fair-competition benefits and pre-requisites.

Finally, in Grades 10, 11 and 12, the students should bring their favorite project and be prepared to practice exemplary team leadership and innovation throughout all tasks, create a responsibility chart and address the issues of uncertainty with a greater comfort, matrix structures, scarce resource allocation across multiple projects in different time zones, budgeting in multiple currencies and earned value analysis, planning and control. They should also master the key variables in decision value, priority-setting and time management

On ethics, it is best for society to invest in early education and prevention to create a better and safe society and control the downstream cost of dissuasion, compliance and enforcement measures, which are no less vital. Citing our earlier work in a report to the UNESCO's Director General titled "Strengthening the UNESCO and Overhauling Its essence":

"Since the ethical reflex is not, alas, a prerequisite for survival in a Darwinian context, developing an ethical mindset must take place before a competing mindset takes over. Building a strong character with absolute integrity takes a long time and is best achieved during the formative years at home and in the classroom. Otherwise, even idealists remain fragile as demonstrated by an extensive study of MBA students.⁴ Many succumb to the array of temptations that are ubiquitous in adult power circles."

"Early life exposure to ethical leadership dilemmas is more paramount than ever for teenagers to develop a pattern of responses to the variety of situations they are bound to face later as adults.⁶ Being ethical can be either by choice or by necessity. The first, motivation by choice, results from learning and guided interaction with the environment we face in early childhood and adolescence. Adults deprived of that interaction frequently act by necessity: compliance to authority (law enforcement), avoidance of penalty, image and group pressure. But these instruments of influence and control are merely substitutes for self-motivation. Enforcement tends to be costly and frequently inadequate as a means of dissuasion."

Conclusion

These illustrations of our vision vividly bring to life the radical competencies' improvements, within our reach through innovation, complexity reduction, exemplary team leadership and collaborative teamwork, that would vastly enhance high performance and inclusion at the workplace, reduce underemployment, boost competitiveness and endow the youth with the vital universal skills that they now lack when leaving high school and even college.

¹ Harvard University Global System™ (HUGS) is an effective library of proven complexity-reduction instruments to help you improve personal and team productivity, decision quality and innovation capacity at work. HUGS facilitates the implementation of innovation governance, the prerequisite for building a vibrant innovation culture. Currently, HUGS features management road maps in 3-D wall-poster size and working templates. PDI is developing a series of HUGS apps that will constitute the building blocks of Harvard® software suite.

² This work in progress, now part of Harvard University Global System[™], builds on the extensive body of knowledge in disruptive innovations, complexity reduction, pattern recognition, failure analysis, diagnostic medicine, reverse engineering, defense intelligence, creativity techniques, conceptual modeling and the study of several market-pull and provider-push innovations.

³ Those who derive most benefits from it work in an environment where the iterative funneling process of ideas and means-ends options and experimentation are ubiquitous across teams and tasks. For some, a strategy to embrace and practice innovation was a prerequisite.

⁴ Thomas R. Piper, Mary C. Gentile and Sharon Daloz Parks: <u>Can Ethics be Taught? Perspectives, Challenges and Approaches at</u> Harvard Business School, Harvard Business School Press, Boston, MA, 1993

⁵ Excerpts from Alain Paul Martin's <u>Overhauling The UNESCO and Strengthening Its Essence</u>, Report to the Director General of UNESCO, available at <u>www.eharvard.org/UNESCO</u>

⁶ On the subject, B. F. Skinner wrote that "Those who have been left to learn how to think by themselves are ...almost defenseless against bad logic, superstition, mystical nonsense, and demagoguery. Their ethical self-management is similarly defective. It is not surprising that some of them should have tried to make a virtue of irrationality." B. F. Skinner: <u>Reflections on Behaviorism and Society</u>, Prentice-Hall, Englewood Cliffs, NJ 07632, 1978, p. 150

⁷ Excerpts from Alain Paul Martin's <u>Overhauling The UNESCO and Strengthening Its Essence</u>, Report to the Director General of UNESCO, available at www.eharvard.org/UNESCO