The “Creativity Problem” and the Future of the Japanese Workforce

ABSTRACT: The Japanese government is in the midst of economic and educational reforms to enhance creativity and boost national competitiveness. In this report, three experts explore and evaluate these unprecedented measures. According to Gerald Hane, Japan has already made some progress in removing obstacles to entrepreneurship, allowing innovators to benefit from their ideas, and improving worker mobility—although ample room for improvement remains. Akiko Hashimoto argues that deeply embedded social hierarchies stifle the creativity of Japan’s young people. Youths should be brought into the reform process because creativity cannot be stimulated through top-down regulation, she contends. Misao Hayakawa warns that Japan may go too far in emphasizing choice and individualism at the expense of standards. He maintains that higher education has been more successful than lower education in implementing reforms that are meaningful and measurable.

Introduction

Amy McCreedy

In order to boost national competitiveness, the Japanese government has begun implementing a variety of reforms designed to foster innovation. From giving schoolchildren “room to grow” to deregulating entrepreneurial activity, the government and many in the private sector hope to solve Japan’s so-called “creativity problem.”

Although the economy is improving, more than a decade of economic doldrums has fueled criticism of Japanese classroom and corporate culture. Innovation is now recognized as the single most important ingredient in any modern economy—accounting for more than half of economic growth in America and Britain.1 In Japan, there is much talk about the emigration to the United States of high-profile innovators such as Shuji Nakamura, inventor of the blue and violet semiconductor lasers. Generally, the discussion centers on two separate but related issues: First, how can Japan develop more innovators? Second, how can it nourish, encourage and keep within Japanese borders the innovators it already has?

Productivity is not the only issue. Japan’s much discussed “creativity problem” is linked to broader topics of freedom and personal enrichment that have little to do with economics. Many educational reformers talk not only of lagging international competitiveness, but also of apathy and dejection, especially among the young. To measure such phenomena is difficult—is not society always going to pieces, in someone’s view?—but a startling number of reports are emerging on teenage violence and withdrawal. According to some analysts, a less conformist Japan would be a happier place to grow up and to work. (The basis for comparison is usually the United States, which is unfortunate: America’s many social problems are different from Japan’s.)

This Special Report is the result of a program sponsored by the Asia Program on March 17, which explored these and related topics. The three essays tackle different aspects of the “creativity problem,” and suggest how education, economics, and corporate and family culture

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are all areas of intense debate in Japan. Is educational reform enough? Are current generations risk-adverse—or would they respond to better economic and other incentives? Will strict educational standards be sacrificed on the altar of innovation? Will Japan’s solidly educated “average student” be neglected in favor of nerdy high achievers? The essays in this report offer markedly different answers to these questions.

According to Gerald Hane, founding general partner of Q-Paradigm and former head of International Strategy, White House Office of Science and Technology Policy, Japan does not need to remake itself—it merely has to remove the obstacles to innovation and personal mobility. Focusing on economic (rather than educational) reforms, he points out that the government has already made much progress in unleashing Japan’s latent entrepreneurship by revising the Commercial Code, creating incentives for entrepreneurs, improving pension portability, and relaxing stock market listing requirements. If Japan continues to deregulate, there will be many creative individuals ready to take advantage of opportunities. Recent college graduates, Hane explains, are already boosting their abilities and powers through training, business incubators and technology licensing offices.

Hane points out that Japan possesses a rich history of innovative risk-taking. In the immediate post-war period, many pioneering industrialists and inventors proved that Japanese culture is not inherently antithetical to entrepreneurship. The relatively stagnant environment of the 1960s, 70s and 80s occurred when large-scale corporations profited from advancing incrementally into already established markets. Now, however, other (especially Asian) nations have pursued the same strategy at lower costs. Japan’s tight vertical networks and cross-shareholding arrangements (keiretsu) have become a liability.

Hane focuses on two sources of change. The first is “concerted effort” from Japanese leaders, who recognize that Japan must transform itself to compete. Hane gives credit to the Japanese government for implementing a number of reforms, if belatedly. The second source of change, according to Hane, is pressure from globalization. For example, Japanese stock exchanges did not liberalize their listing rules until NASDAQ opened in Japan in the late 1990s. Also, droves of students returning from U.S. business schools are changing the way things are done in Japan. While returnees find it hard to get support and investment, they benefit from a lack of venture competition, Hane maintains. And new schools such as the Globis Management School are nourishing Japan’s homegrown entrepreneurial culture. While business entrepreneurship is becoming easier, breakthrough research is still extremely difficult, because institutional settings discourage movement in unconventional directions. Also, Hane points out, senior members of universities dislike being questioned.

The inimical effects of Japan’s age hierarchy are further explored by Akiko Hashimoto, associate professor of sociology and Asian studies at the University of Pittsburgh, who contends that Japanese society continues to favor older men and to disempower the young. Hashimoto sees the age hierarchy as more deeply embedded than Hane. While Hane talks of “removing obstacles,” Hashimoto suggests that the seniority system must be pulled up by the roots. “No amount of social reform of education or the workforce can have a lasting impact on creativity without addressing power and authority relations,” she writes. Japan must transform itself from a society that prizes planning, discipline and certainty into one that accommodates flexibility, risk and uncertainty.

Hashimoto criticizes what she hears as a paternalistic tone in governmental reform efforts. The Ministry of Education’s approach—encouraging...
creativity through rules and regulations—will never succeed, for there is an inherent contradiction in trying to “mold” young people into freethinking individuals. Instead, young people must be taught to question authority, including that of the Ministry of Education. According to Hashimoto, students must be brought into the reform process and allowed to actively criticize the very policies that are meant to help them learn better. Also, Japanese institutions from colleges to corporations must allow young people to take second and third chances.

Hashimoto expresses deep sympathy for Japanese young people, who fear the dead end of failure in Japanese society; she does not, however, have much faith in them as instigators of change. While Hane sees young people as eager to elbow ahead, Hashimoto portrays them as “disengaged, apathetic and indifferent.” They tend not to intervene when witnessing injustice or bullying and, deprived of moral guidance by their parents, see “no value or reward in rocking the boat.” While Hane’s view of Japan’s future is cautiously optimistic and robust, Hashimoto’s is chilly and even frightening. However, she suggests that Japan’s preferences for order, hierarchy and protection are impossible in globalized society. Thus she, like Hane, sees global forces as positive. The winds of the future, blowing through a relatively borderless world, will be salutary for Japan.

Misao Hayakawa, professor in the Department of Education at Nagoya University, is more cautious about the effects of globalization and more positive about Japan’s own cultural legacy and traditions. Focusing on education, he warns that Japan may go too far in emphasizing choice and individualism at the expense of standards. Hayakawa points out that Japan must keep an eye on reforms’ effectiveness and is wary of the kind of decentralized “chaos” that prevails in the United States, where local experimentation is common and quality is uneven. (Interestingly, many American reformers have pushed for standardized tests, while Japan has emphasized “room to grow” and teacher freedom.) Hayakawa praises the equity of the Japanese educational system, which aims for “fundamental academic achievement among all students.”

Hayakawa feels that reform of higher education, in particular, has been moderately successful. He hopes that Japanese colleges will eventually “cease to be four years of leisure and rest” through a rigorous raising of standards. He praises the government’s Center of Excellence (COE) program in education, which awarded 80 special grants in 2003 to colleges and departments to introduce innovations in teaching methods that “promote meaningful progress in learning and intensify assessment of that learning.”

Hayakawa supports many concepts that are fairly new in Japan, such as school choice, but he also looks to Japan’s past for answers. He praises many traditional (pre-Occupation) aspects of Japanese education, which “are not necessarily restricted to rote learning, as some Western critics believe, nor incapable of adapting to modernization.” For example, traditions such as martial arts and archery motivate students by specifying clear steps to mastery.

Change will not occur overnight. Anne Imamura, who served as commentator at the March 17 event, warned against evaluating the results of reform too soon. One problem is that the system of test-taking is thoroughly entrenched in Japan. Reforms that aim to give students time to explore their own interests—eliminating Saturday schooling, for example—merely boost the private juku (cram school) business. As long as colleges have tough entrance exams, students and families will gear their efforts toward succeeding at them.

One topic relatively unexplored by the three essayists is the effect of Japan’s declining population. An increase in available college slots per student will ease the competition of “examination hell.” But institutions, especially less elite ones, will have to attract students however they can—perhaps by offering more interesting classes, but perhaps by keeping homework low. One thing is certain: demographic and market forces will continue to affect Japanese education at least as much as the wishes of Ministry of Education officials.

ENDNOTES

Entrepreneurship” and “Japan” are two words that are not frequently associated. However, reforms have substantially improved the environment for venture entrepreneurship since the late 1990s. Even in the shadow of a 14-year economic slump, entrepreneurial activity is steadily increasing.

Many in the international community openly doubt whether Japan can possess a vibrant entrepreneurial sector, citing Japan’s group-oriented, consensus-bound society and an educational system that emphasizes rote memorization over open inquiry. However, individuals and organizations are responding to changing incentives to take new risks, a dynamic which may feed back to reshape education and social expectations, further spurring entrepreneurial activity. The lack of a culture for entrepreneurship is not the issue.

The past century has included periods of strong entrepreneurship in Japan. The late 19th and early 20th century saw the founding of such companies as Matsushita, Toyota, Hitachi, Ricoh, Sharp, Seiko and Canon. In the 1950s, Sony, Honda, Casio and Kyocera, rose to become global competitors.

Yet when one looks at the 60s, 70s and 80s, there are fewer striking examples of entrepreneurial success. As the national economy expanded into a major global force, venture firms seemed to fade from the scene. Why? In achieving postwar prosperity, did Japan reject entrepreneurship? How has reform—policy reforms and private restructuring—prompted the current incipient recovery in entrepreneurship, and how can it be enhanced further?

**Changing the Old Industrial Model**

The Japanese model of economic success in the latter 20th century was dominated by large-scale organizations and insular networks. Japanese firms benefited from educated but “captive” workers; emphasized production scale, quality, and speed; and incrementally innovated into already established markets. Buttressed by industrial policies and protected by powerful corporate and political interests, the system included no major role for venture entrepreneurship.

Instead, small and medium enterprises were just that: small and medium enterprises. In manufacturing, these enterprises served as subcontractors and suppliers to the larger corporations. They could grow incrementally with orders from clients. But since they belonged to specific industrial groups (keiretsu), they were not free to expand their markets to include non-keiretsu customers.

However, the 14-year economic slump has led policy makers and corporate leaders to realize that the powerful industrial system that they created is now a handicap. Incremental, catch-up innovation is no longer viable as other (especially Asian) nations have pursued the same strategy at lower costs. And tight vertical networks, which successfully exploited efficiencies of production, are not well matched to risky breakthrough innovations. Japanese leaders took note of the fact that, in the United States, many “disruptive” innovations come from entrepreneurs and small venture companies—and generated new technologies that aided the United States’ economic recovery in the 1990s.

About five years ago, leaders launched a concerted effort to replace negative incentives to entrepreneurship with positive ones, for both individuals and corporations. This effort affected areas from finance to corporate governance—the entire infrastructure that supports innovation (see Table 1).

**Incentives for Entrepreneurs**

Stock options and equity awards are now available to attract employees to ventures and lubricate the still largely immobile personnel flow in Japan. Pensions are more portable (similar to the 401K in the United States), and the costs of establishing a

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company are far reduced. Liability is now limited to the company, and early-stage seed and venture funds are more abundant. As recently as the late-1990's, individuals relied on loans from banks or family. If bankruptcy occurred, the entrepreneur was usually typically personally liable for any financing received. Company ruin meant personal ruin.

Moreover, entrepreneurs benefit from, Technology Licensing Offices and business incubators, which help university graduates set up businesses, find customers, and deal with complex issues such as intellectual property.

More than 70 technology licensing offices are associated with universities, up from zero in 1997. 60 business incubators were established in 2000 - up from fewer than 10 during each year of the 1990s. Although private incubators have receded with the Internet bubble, public incubators continue to grow. Virtually all prefectures have established incubators, as have many universities and local governments, providing more affordable office space, telecommunications access, business services and wet lab space.

**INCENTIVES TO INVESTORS**

The advent of venture-friendly stock exchanges has given investors new opportunities for returns. Taxes are lower, especially for Angel investors, and stock

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**Table 1. Summary of Significant Measures to Promote Venture Entrepreneurship**

**FINANCE**

- Law allowing corporate pensions and trust banks to invest in venture capital (1997)
- Establishment of Angel tax incentive (1997)
- Law allowing pensions in general to invest in venture capital (1997)
- Law enabling Limited Partnerships to form (1998)
- Law allowing stock swaps to facilitate M&A (1998)
- Relaxation of listing requirements on the Over-the-Counter Market (1998)
- Opening of the Mothers Market (1999)
- Law relaxing stock market listing requirements (1999)
- Small and Medium Enterprise Corporation begins investing in private venture capital (1999)
- Opening of NASDAQ Japan (2000)
- Increased requirement for corporate pension reserves (2000)
- Elimination of 50,000 yen minimum par value requirement (2001)

**CORPORATE GOVERNANCE**

- Law requiring consolidated corporate reporting (2000)
- Venture Board membership allowed for venture capital investors (1997)
- Law allowing company formation with minimum capitalization (2003)

**TECHNOLOGY TRANSFER**

- Law promoting formation of Technology Licensing Offices (1998)
- Promotion of active intellectual property management at universities (2001- )
- Law allowing national university researchers to receive external (consulting) income and to manage start-ups (2000)
- Promotion of technology and business incubation facilities (1999- )

**INDIVIDUAL INCENTIVES**

- Establishment of 401k-like pension plans (2001)
- Law limiting liability of entrepreneurs (2001)
swaps facilitate mergers and acquisitions. Oversight is strengthened by a new ability to sit on the boards of invested companies. Oversight is strengthened by including investors as board members.

The more important change is not in sources of funds but in opportunities for returns on investment. Until the late-1990s, young companies found it difficult to achieve public stock offerings. The average age of a company achieving a public listing on the small and medium company exchange, the JASDAQ, was 34 years—a long time for investors to wait. On the U.S. NASDAQ, the average is five to seven years. When the NASDAQ announced it was going to open in Japan in the late 1990s, the Japanese stock exchanges responded immediately: the JASDAQ liberalized its listing rules, and the larger Tokyo Stock Exchange created its own venture exchange, the Market of the High-Growth and Emerging Stocks (MOTHERS). By mid 2000, there were three venture-friendly stock exchanges. Although NASDAQ left Japan at the end of 2002, the key changes are in place.

On the supply side, larger sources of funding are now potentially available. Regulatory changes in 1997 allowed pension funds to invest in venture capital funds. In the United States, similar changes in pension fund investment rules in 1979 are credited with giving rise to the modern U.S. venture capital industry.

With these numerous changes in incentives and resources, potential entrepreneurs and their investors are faced with a much more attractive environment than only a few years ago.

Reforms with Results

In response to these improved incentives, there has been a substantial rise in venture entrepreneurship from invention to application. Figure 1 shows the increase in invention disclosures from Japanese national universities. There was a six-fold increase from 1997 to 2002. Perhaps an equal number of disclosures go unreported. Private universities also conduct research—60 percent as much as national universities. Thus, total invention disclosures in 2002 may be as high as 8,000, which is equal to the number of invention disclosures at U.S. universities in 1992. Per capita, the output may be comparable to the United States or greater.

The number of university spin-off ventures is also going up. As Figure 2 shows, spin-off ventures increased almost 20-fold from 1996 to 2003, to 190 ventures last year.

Outside of the university environment, one can...
witness other signs of entrepreneurial interest. For example, in February 2003 the government revised the Commercial Code so that it became possible to establish a company with only one yen of capital. (A five-year grace period was allowed to raise the capital needed for registration.) Within the first 14 months over 10,000 companies were established. Only about 4 percent were actually one-yen companies.

Public equity markets have been rewarding those venture companies that show they can grow. The venture exchanges hosted 100 IPOs in 2002 and 2003—down from the peak of 160 in the Internet era, but solid compared with the 22 venture capital-backed IPOs in the United States in 2003. In 2004, 130 venture IPOs are projected for Japan.

For some companies, the reception on the market is substantial. For example, the largest biotechnology venture IPO in the world in 2003 (measured in capitalization) was Japan’s Oncotherapy Sciences, a university spin-off which achieved a valuation of over $1.2 billion on its opening day.

The above changes have spurred interest in entrepreneurship among mid-career professionals, reflecting the uncertain future of employment at many larger corporations. For example, in 2002 Matsushita offered an early retirement package—a $450,000 bonus and activation of pensions—to individuals who had just entered their 50s. The corporation anticipated that about 1,000 people might take the package. In fact, 13,000 people left.

**CHALLENGES REMAIN**

There is still ample room for improvement and reform, including educational reform. Japan would benefit from broader education about models of successful business. More generally, diversifying the perspectives of individuals would help catalyze entrepreneurship.

*Specialized training.* Japanese universities do not generally train students in the business of being an entrepreneur. Of 98 national universities, only one, Hitotsubashi University, has a notable business program. Even in private universities, only a handful of established business programs exist. In the numerous nascent Technology Management programs, the practicality of the curricula is uncertain.

*Different perspectives.* At a forum for aspiring entrepreneurs hosted by the University of Tokyo, Professor Shuji Nakamura, iconoclast and inventor of the blue laser and now professor at the University of California at Santa Barbara, was asked to advise students on how to follow him in pursuing breakthrough research. If they stay in Japan, he replied, “it is impossible.”

Why so? First, there is the difficulty of challenging and questioning senior members of universities,
companies, and society. Institutional settings in Japan discourage any movement in unconventional directions. A second factor, just as important and often overlooked, is the need for change in perspective—a key source of innovation. Nicholas Negroponte, co-founder of the M.I.T. Media Lab, once observed: “Our biggest challenge in stimulating a creative culture is finding ways to encourage multiple points of view. Many engineering deadlocks have been broken by people who are not engineers at all. This is simply because perspective is more important than IQ.”

Many scientific breakthroughs involve looking at old problems in new ways. International exposure can help would-be innovators to recalibrate perspectives and see new opportunities. Established social institutions—such as seniority—can be productively bypassed through changes in angle and perspective.

Two of Japan’s most successful recent entrepreneurs are cases in point. Hiroshi Mikitani was on the fast track in the Industrial Bank of Japan. He won a chance to study at the Harvard Business School, beating 100 other Bank employees. He caught his fellow Harvard students’ enthusiasm for creating new businesses around rapidly advancing information technology, and developed a business concept that was a hybrid of what later became Amazon.com and Ebay. According to Mikitani, no one in Japan believed in or would support his plan except for his partner and himself. They invested their own money to develop the skeleton of an on-line mall connect-

Policy and business reforms have changed dramatically the incentives of individuals and organizations to pursue venture entrepreneurship.

ing retailers across the country to consumers. Today, Mikitani’s company, Rakuten, is worth more than $7 billion. He went from a normal salary to becoming a billionaire in a few years, and comments that the lack of venture competition makes it easier to be successful in Japan than in the United States.

A second example is Yoshito Hori, founder of the Globis Management School. Like Mikitani, Hori was dispatched from his corporation, Sumitomo Corporation, to study at Harvard Business School in the early 1990s. He was immediately struck by his classmates’ lack of interest in using their MBAs to move up the corporate ladder; instead, they were changing direction and pursuing their own companies. Upon returning to Japan, he and two partners decided to establish a mid-career business school that would draw upon Harvard Business School case studies. They found little interest at first. In a last ditch advertising effort, the group invested their remaining funds in a full-page advertisement in the Nikkei newspaper and went to work the next day wondering if anyone would call. Globis Management School was begun with 25 students who responded to that ad. Today the School has over 3,000 students and Mr. Hori spends more of his time as a leading venture capitalist in the information technology area, in a joint venture with APAX partners of the United States.

Policy and business reforms have changed dramatically the incentives of individuals and organizations to pursue venture entrepreneurship, along the entire pipeline of the innovation process. Many challenges remain, but venture entrepreneurship is steadily gaining strength in Japan’s economy. New social expectations and educational reforms, particularly if they encourage students to challenge convention, promise to further spur creativity. However, it may be that change runs mostly the other way, at first—innovator’s success will prompt educational improvements and whole new ways of thinking about success.
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n a recent international survey that explored the state of entrepreneurial interest among young adults today, Japanese youth were ranked the lowest among several postindustrial nations. This survey, carried out by the Sogyo Venture National Forum in 2001, found that the entrepreneurial spirit was alive and well in several countries; for example, 64% of American youth responded that they could see themselves running their own enterprises, as did 71% of their South Korean counterparts. By contrast, only about one third of Japanese youth (36%) said they were interested in creating or working in a new venture. These results undoubtedly disappointed the sponsor’s of the study who evidently hoped to promote those aspirations and ambitions.1

Another recent study revealed a similar trend, supporting the observation that Japanese youth today tend to have rather limited and conservative aspirations. In this survey, Japanese teens were asked what they would value most in their life when grown up. Following family, friends, health, and money, their “dream” ranked eighth, their “work” ninth, “freedom” eleventh, and finally, life “challenge” ranked fourteenth.2

To the alarmed media reporting these trends, Japanese youth today are uninspired and even dull. The media’s message is clear: something is wrong with these youth, and they need to be fixed. Moreover, it is not uncommon for journalists to problematize Japanese youth for “deviant” behavior such as bullying, refusal to attend school, class disruption, teen prostitution, family violence, and social withdrawal.

At an analytical level, however, astute commentators have pointed out that youth today are experiencing a generalized sense of social suffocation (heisoku) and alienation.3 Although the young are supposed to be relatively energetic and bold, their motivation and behavior are constricted. According to this perspective, blaming the victim will not solve anything. To get to the root cause of the behavior is more important than rushing to temporary solutions.

In this essay I will probe some causes of the so-called “problem of creativity” among Japanese youth. I will focus on two issues: (1) obedience, and the generational hierarchy that stifles motivation and inspiration, and (2) paternalistic authority and orthodoxies that suppress criticism and innovation. In other words, I will argue that no amount of social reform of education or the workforce can have a lasting impact on creativity without addressing power and authority relations.

THE SEARCH FOR RENEWED CULTURAL IDENTITY IN A GLOBAL AGE

When Japan began its search for a new social vision in the 1990s—as the Cold War ended, and economic and cultural globalization intensified—it did so with the realization that the social institutions and economic organizations that benefited Japan in past decades were now outmoded and rapidly losing their relevance. The paternalistic and protectionist social, economic, and political institutions were now out of sync with global realities that raised new and urgent demands. The ripple effects of the bursting of the economic bubble in 1989-1991 were serious: a gradual breakdown in lifelong employment, the symbolic pillar of Japan’s job security, and a gradual shift from a seniority-based reward system to one geared more toward meritocracy. Social stability seemed precarious. In this uncertain climate, discontent grew in the middle class and among the younger generation. It seemed that diligence and hard work would no longer guarantee a better life.

In the globalizing world of Heisei Japan, the urgent task is to re-envision and reform the social institutions. Specifically, Japan is called to transform itself from a society that prizes planning, discipline, and certainty into one that accommodates flexibility, risk, and uncertainty. However, such shift requires

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a remaking of cultural identity. On the one hand, change means revising certain choices that increasingly serve Japan ill in global economic competition—preferences for order, hierarchy, protection, and the safety of isolation, which are no longer tenable in an increasingly borderless world. On the other hand, change also means improvising, and mixing with unfamiliar people. Japan is already irrevocably swept in the tide of the international economy and global culture. Although the myth of Japanese homogeneity has long been dissolved, a sense of threat from ongoing cultural hybridization continues today.

**The Disempowerment of Youth as a Social Impediment**

When social reforms of this scale are needed, calls for generational turnover would not be astonishing. The need to empower the younger generation as carriers of social change would seem relatively obvious, yet has received little attention. Part of the reason could be that, historically, Japan has often safeguarded the social order by suppressing the power of the young—by regulating their interests, assigning them obligations, and giving them incentives to stay in their “proper place.” The ideologies of filial piety and obedience are primary examples of such dynamics, as are the *sempai-kōhai* and *nenko* age hierarchies. Such ideologies, although unwritten in any legal document or official moral instruction manual, constitute a powerful force of normative regulation. The “rules” of invisible hierarchies that privilege the older generations at the expense of the younger underlie the patriarchal template in Japan.

If Japan cannot alter the power hierarchies between generations, it will remain locked in a deep social contradiction—attempting to move forward while holding back the young creative power necessary for such movement. It is characteristic of this stalemate that Japanese youth have the lowest levels of entrepreneurial interest among postindustrial societies. The lack of respect afforded to young people only ends up stifling their creative energy and motivation and exacerbating their disengagement from society.

Youth show disengagement more by what they do not do than by what they do. For example, researchers found that only 22% of Japanese young people are “likely to intercede” when they witness bullying, compared to 39% in Korea, 48% in the United States and 53% in Germany. Moreover, 30% of Japanese have never tried to stop friends from fighting (9% in Korea, 16% in the United States, and 14% in Germany). What emerges from this data is a picture of disengaged, apathetic and indifferent children, who see no value or reward in rocking the boat.

Furthermore, these children do not seem to receive the guidance and mentorship that would empower them to take initiative and grow up with confidence. The same international survey shows that Japanese parents offer less instruction than their Korean, American and German counterparts. For example, a large proportion of Japanese youth reported that their parents did not teach them to be truthful (never taught by father 71%; by mother 60%). Young Japanese seem far more disengaged from parents than Korean children (never taught by father 27%; by mother 22%), Americans (never taught by father 22%; by mother 21%), and Germans (never taught by father 42%; by mother 38%). Japanese children learn far less from parents, siblings, and teachers, compared to American children; and those who report having “nobody to talk to” or “nobody to learn values from” is consistently much higher in Japan than in the United States. While some of these comparative differences may arguably come from the Japanese practice of privileging learning over teaching, the reality of parent-child estrangement is evident.

Control over intergenerational power dynamics has helped safeguard order, stability and security in Japanese history. The system is one of invisible surveillance, in which filial piety and the age hierarchy serve to exact obedience. The price—alienation and muted anger among young people, who are not
allowed to give priority to their own lives—manifests itself in today’s social “problems.”

**The Regulation of Youth as a Social Barrier**

The premise that the state has authority to shape individual lives also hampers efforts to foster creativity through educational reforms. Throughout the past century, Japan has tended to use education to cast citizens into useful workers or soldiers, rather than to facilitate individual achievement. Meiji education, for example, served explicitly to make “desirable” citizens. Since the occupation’s Fundamental Law of Education in 1947, state policy has been openly contested between progressive and conservative forces. Yet the idea of an educational authority, selecting and dispensing legitimized knowledge, survived. The idea that custodians of knowledge can mold youth continues to underlie modern education.

State policy sets goals, and lays down rules for people to follow. To set down rules to help individuals think freely is, however, an obvious contradiction. If the new education policy is to foster creativity, the premise that it can mold creative behavior itself must be questioned. To be effective, reforms must address whether it makes sense to prescribe creativity, regulate the free imagination, and enforce innovation. How can such a fundamental contradiction be resolved? One possible option is to incorporate the active questioning of authority into the school curriculum itself, which generally neglected to teach students to think critically. An environment where orthodox knowledge is openly challenged and disputed and where new ideas are tolerated and developed, is indispensable in freeing imaginations and fostering innovative thinking.

For students to question the goals and rules set by authority for their benefit—including education policy—would seem a good way to start developing their ability to think innovatively. Again, this scenario requires that youth be empowered, so that their voices challenging the prevailing wisdom are made to count.

**The Empowerment of Youth for Social Renewal**

Although not all commentators agree, Japan’s “lost decade” does not have to be seen as a complete loss. A period of social flux is an opportunity to re-envision the future and find a new direction. Generations turn over slowly, but the process allows us to address and gradually chip away at the social impediments to reform. Japan has a chance to resolve the “aspiration crisis” by reassessing the relationship between authority and obedience, and the invisible disempowerment of younger generations that is often taken for granted.

One step would be better emotional socialization of children at home. Another would be opening job competition to creative people who are currently socially marginalized—of all ages, genders, ethnicities, and nationalities. These measures and others would help society offer its members second and third chances, even when the first chance ends in failure—whether in school, work, or family. In Japan, young people fear the dead ends that await them after initial failure. Rich opportunities for lateral mobility would allow them to take risks and imagine new beginnings in mid-career. To address the fear of failure is to create opportunities for people to recover from failures, by opening the schools and job markets to people of all ages with fewer restrictions.

To the extent that creativity is deemed a “problem,” and the aspiration crisis is part of that “problem,” the price of not empowering young generations is high. Leonard Schoppa has underlined the problem of Japanese citizens giving up on (“exit-ing”) Japan on a number of economic, participatory and psychological levels. He suggests that without flexible opportunities, creative Japanese people will inevitably look elsewhere for work in the global world. To be sure, many have been known to resist disempowerment by opting out of the system. As transnational migration becomes more common, therefore, Japan may find itself competing not only to renew, but also to retain its creative energy.

**Endnotes**

1. “Nihon no wakamono, kigyoni moezu” [“Japanese Youth, Not Interested in Enterprise”] Nihon Keizai Newspaper, March 15th, 2001. The survey, which sampled youth aged 18-25 in six nations (Japan, the United States, Great Britain, France, Germany and South Korea), was carried out in by the Sogyo bencha kokumin foramu headed by Ezaki Reona.
2. “Okane eno ishiki, oyako de sa,” [“Parent–child Differences in Attitudes toward Money”] Asahi Newspaper, September 8, 2003. The survey was carried out by the Kumon Kodomo Kenkyujo in Osaka and sampled youth aged 10–18.


Japanese Creativity and the Present Educational Reform

The Japanese economy has been staggering for almost 15 years since the beginning of the early 1990s—almost everyday we hear of company shutdowns and shrinking enrollments in schools, colleges, and universities. Due to the declining birthrate, the number of 18-year-olds decreased from 2.5 million in 1966 to 1.5 million in 2002, and is predicted to fall to 1.2 million in 2009. How can companies and schools produce a creative, highly productive workforce to offset the ill effects of the sputtering economy and contracting population? Japan faces this situation as the global economy’s impact increases and China challenges Japan in business, industry and even education.

Japanese educational reform is not proving as successful in meeting these massive challenges as many of its proponents expected. When the current reform movement was initiated in the 1980s, the economy was booming, but companies knew they needed a diversified workforce to respond to global competition. The reforms were begun with high hopes, but, in fact, Japanese academic excellence has deteriorated over the past several years. For example, national tests in 2002 show that math (basic calculation), problem-solving skills and motivation have declined in grades 1-12. While 22 percent of high school seniors say they study more than three hours per day after school, 43 percent claim to study not at all. The former group’s average test score is 582 (out of 700); the latter’s is 442—educators and researchers complain that the gap between high and low achievers is widening. At the elementary school level, students spend 30 minutes a day on homework, while Chinese students spend more than three hours. Japanese educators are also surprised to learn that the average American child studies more than the average Japanese child.

While educational reform has achieved many accomplishments (discussed below), there remains much room for improvement. In this essay, I argue that Japanese reform needs to place more emphasis on “results”—on excellence and standards. To the extent that reform of higher education has done so, it has proved more successful than programs at the junior high and senior high levels, which tend to emphasize choice, diversity and individuality. There is nothing wrong with experimentation, but until the effects of reform can be rigorously and concretely measured, Japan will not be able to achieve its goals of improving academic excellence. The 15-year reform movement has put Japanese teachers in a double bind—they enjoy having more choice and alternatives but deplore the fall in academic achievements.

Current Reform Trends

In the mid-1980s, Prime Minister Yasuhiro Nakasone’s government initiated a turn from standardized education to “choice, discretion and diversity” at the elementary, junior high and senior high levels. Meanwhile, the United States, a so-called “nation at risk,” was moving in the opposite direction, looking to Japan as a model for standardization—which surprised Japanese educators. In fact, both countries share the goal of improving education quality.

In April 1998, the Ministry of Education announced an action plan that put educational programs in four categories: 1) educating the mind, 2) emphasizing individuality and choice, 3) providing more discretion to local districts to innovate and hire business professionals as principals, and 4) reforming and promoting scientific research at universities. The Ministry provided financial and legal support to implement these programs. For example, “education of the mind” involved a new teacher certification system (1999), a five-day school week (2002), and experiential, “comprehensive” learning (2002 for elementary and junior high schools; 2003 for senior high schools). To emphasize individuality and choice, the government introduced six-year sec-

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On secondary schools (1999), school choice in some Tokyo districts (2001), and early college enrollment (1999). To enhance scientific research, Japan deregulated curricula and programs (1991). The Center of Excellence (COE) began its Program in Research in 2002, with approximately $150 million each year, and its Program in Education in 2003 with about $100,000 per project. National universities will incorporate in 2004, though they will receive subsidies for basic costs in education, research and management. Every year, the number of joint research projects between universities and industries increases, and is expected to grow rapidly in the future.

These are positive developments. Yet, despite reformers’ hopes, the 1990s trend of “discretion and leeway” has not markedly improved the quality of education. Indeed, there has been a decline in achievement (especially in math and science), deteriorating motivation, a widening gap between high and low performing schools, and a “credibility crisis” in university education and management. Even within the Ministry, not everyone agrees on ideals and goals. What should be done?

**WHAT WORKS?**

Although present policies emphasize deregulation and free competition, the government continues to play an important role in influencing the directions of the reform, for which it has attracted criticism in recent years. However, this governmental role is not necessarily bad. One of the reform movement’s main achievements has been to make pragmatic standards of evaluation—assessing the cumulative accomplishments of educational and research institutions and their future possibilities—widely accepted and adopted in higher education. A similar results-based approach at the lower levels would be similarly effective.

In 2003, 664 colleges and departments applied to the Center of Excellence (COE) Program in Education. Eighty special grants were awarded to introduce innovations in teaching methods, develop multi-disciplinary and liberal arts curricula, facilitate university-community coordination, establish extracurricular activities, and promote other projects that do not just aim for novelty but promote meaningful progress in learning and intensify assessment of such learning. Colleges and universities are also expected to develop programs to enhance student motivation, the importance of which has been promoted by the COE Program in Education.

These activities will help boost the quality of undergraduate teaching and learning to levels commensurate with U.S. and European standards and accepted by international accreditation agencies, and win international recognition in both education and research. College must cease to be four years of leisure and rest—rigorous programs must guarantee the quality of college graduates to graduate and professional schools. Graduate programs themselves (graduate students have expanded from 90,000 in 1990 to 205,000 in 2000) must be sufficiently structured to match levels at U.S. universities, using innovative management and effective governance. These efforts have just started and will require improvement in the next decade. The extent to which such pragmatic measures have spread was eminently clear when results were announced for the competitive COE Programs in Research and Education in 2002 and 2003.

Japan must continue to improve evaluation and accountability in education and introduce programs that are viable and workable. The system must emphasize concrete knowledge and skills, dynamic processes of learning and commitment, and visible achievements such as qualifications, certifications, and licensures.

The situation in pre-college education is somewhat chaotic, with some schools delving into experimental learning, some brushing up the academic curriculum, and others seeking “hybrid” solutions. Again, experimentation is well and good—but programs must go beyond being fashionable or “postmodern” and stand up to rigorous scrutiny. Reform must be faithful to its original spirit and focus on what works.

**THE STRENGTHS OF JAPANESE EDUCATION**

Many reformers maintain that Japan must turn away from formalistic education, which they claim decreases student motivation. But the answer lies not in abandoning Japanese educational forms, but in developing and using them properly. In fact, one strength of Japanese educational forms is that they are compatible with a result-based approach as described above.
Historically, such forms involved a comprehensive striving toward mastery, based on concrete, visible steps toward mastery and hierarchies determining distinctive levels of craft. The steps are 1) faithful observance of custom, knowledge, and skills, 2) creative overstepping of the form or frame given and accepted, and, 3) construction of one’s own original form. Such a system specifies the length of time for mastery, the scope of mastery, and the skills and craft required of the master teacher. It characterizes Japan’s traditional practical/martial arts such as flower arrangement, kendo, judo, and archery.

Japanese educational forms are not necessarily restricted to rote learning, as some Western critics believe, nor incapable of adapting to modernization. In fact, Japanese education was instrumental in contributing to Japan’s modernization during the late 19th century. In fact, the system’s foundations preceded the major impact of Western institutions, sciences, and knowledge, and it was Japanese creativity, ingenuity, and flexibility that were primarily responsible for education’s rapid expansion. The Japanese show “tact” and versatility when confronting foreign culture and adapting foreign elements to their own traditions. Thus, they altered classroom structure, teaching methods, textbooks, and examination systems to win acceptance from the majority of the population. The fundamental system of education was consolidated before the establishment of U.S. practices after World War II.

Japan has been successful in popularizing the modern educational system through devising and developing such forms, in which all people can readily participate. By exploring these forms further, Japan can enhance the ingenuity of its students and promote commitment to learning.

How do Japanese students learn through such forms? They memorize multiplication table by chorus repetition and Chinese characters by writing in the air with a hand. They master basic skills—flute, for example—both with the whole class and individually. In general, teachers at elementary schools are the most enthusiastic and skillful in providing materials and opportunities for learning basic forms. In higher grades, incorporating the forms is more difficult, and schools have come to emphasize ingenuity in doing so in teacher recruitment and training, in order to enhance students’ interest and abilities.

**Some More Tasks for the Next Decade**

How shall Japan reform its education system to train the next generation? I argue that, in addition to the above, Japan must address four main issues in order to promote creativity and achieve a competitive workforce.

First, colleges and universities must address the issue of declining enrollment by re-examining their role in society. Many institutions face financial hardship, even bankruptcy, if they do not look beyond their traditional applicant pools. They must develop new educational programs and attract new types of students, such as adult learners, as did their U.S. counterparts during the last quarter of the 20th century.

Second, junior high and high schools—both private and public—must meet the needs of their “clients” or close down. A policy that allows families more choice among schools would prompt teachers and school administrators to compete for the trust of parents and students.

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Third, schools must strive to prevent the widening of the achievement gap. As noted above, market forces will inevitably affect education, but Japan must preserve the tradition of egalitarianism that promotes equal treatment among students, and which is now endangered. Middle-level achievers are decreasing, and polarization between “knows” and “know-nots” threatens to fragment society.

Already, the increasing number of part-time workers (“freeters”) shows that too many Japanese young people lack aspirations and commitment to goals, as sociologists and psychologists have observed. Japanese companies currently employ 4.17 part-time workers, and will require up to 4.76 million by 2010. As many as half of Japanese employees could be part time by 2050. It is no wonder younger generations are losing hope for the future. According to a survey of 1200 Japanese high
school students by the Japan Youth Research Institute in 2001, 53 percent expressed lack of pride in themselves, compared to 24 percent of Americans and 23 percent of Chinese. Japan must introduce new visions, goals, and methods based on traditional ideals and practices—on the premise that fundamental academic achievement among all students is important for an industrious and creative society.

Reform at all levels of education is important, but Japan’s future depends most on the quality of its colleges and universities, which should be on the vanguard of reform. Higher education links school and workplace, and its quality determines the ability of society to solve its problems. It is the pivot for all educational reorganization. For example, a shift in college requirements will affect what research skills and methods of inquiry are taught at elementary schools. And if college entrance examinations do not change, of what use is national deregulation of curriculum content? Government-required content in textbooks will decrease by one third, effective in elementary and junior high schools in 2002 and in senior high schools in 2003. However, the “degreeocracy” continues to prevail in Japan as long as students rely on cram schools to learn test-taking secrets and skills to pass entrance examinations—the culmination of a 12-year academic career. It is not the government so much as selective colleges that are the champions of formalistic education in our country.

The next decade will be crucial in laying the foundation for a new education paradigm. Merely calling for more industriousness in youth and children (so-called “effort-ism”) will no longer suffice. Instead, parents and teachers would do better to show they care by providing learning situations in which young people can master concrete skills, knowledge, and motivation and thereby achieve confidence and direction. Reform must re-establish communities of caring and learning among parents and educators. Our educational system works when it empowers youth. This is our task for the next decade and for the next generation.

ENDNOTES

1. Ministry of Education, Culture, Sports, Science and Technology, Monbu-kagaku tokei yanran [Statistical


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