Japan: From "Examination Hell" to "Living Power" and Back

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Abstract

In this article, I analyze the experience of Japan - a country that has undergone, perhaps, the most dramatic path of educational reforms in modern history. From the model of "examination hell" (shiken jigoku), which defined Japan's post-war development, through the "relaxed education" (yutori kyōiku) of 1998-1999, to "living power" (ikiru chikara) and back - to the strengthening of academic requirements after the "PISA shock" of 2003. Relying on the research of Peter Cave (University of Manchester) [1], Hiroshi Sato (University of Tsukuba) [2], as well as analytical reviews by the OECD [3], [4], [6], [7], I show that the Japanese experience is both impressive and deeply contradictory. On the one hand, Japan demonstrates some of the best results in the world [7], and its consistent reforms - from "competencies added to subjects" (1998-1999) to "competencies integrated into subjects" (2017-2018) - reflect the evolution of global pedagogical thought [1]. On the other hand, Japanese reforms have fallen victim to their own ambition: they were poorly prepared, insufficiently resourced, misunderstood by teachers and parents, and ultimately led to an increase in inequality and social segregation [2], [5]. I also show that the Japanese model, despite its external attractiveness to supporters of "holistic education," fundamentally diverges from the communicative-cognitive framework of personality (CCFP) model: it remains exam-centric, does not offer systemic diagnostics of mental mechanisms, and does not account for the uniqueness of each child through their natural abilities [8], [9].

Keywords: Japan, yutori kyōiku, relaxed education, ikiru chikara, living power, PISA shock, examination hell, hikikomori, juku, communicative-cognitive framework of personality.

Introduction: Why Japan

Japan is a country that has always held a special interest for me. Perhaps because it represents, perhaps, the most striking example of how deeply cultural traditions can determine educational practice - and how difficult it is to change these traditions.

In post-war Japan, a system developed that researchers call "examination hell" (shiken jigoku). At the center of this system are entrance exams to prestigious universities, which determine a person's entire future life. An entire industry is built around this system: juku (private cram schools), yobiko (exam preparation schools), and endless tutors. And this system, for all its harshness, proved to be incredibly effective: Japan became one of the world's leading economies, and its schoolchildren consistently demonstrated outstanding results in international comparisons [7].

Here it is appropriate to recall the image of a Japanese rock garden (karesansui). In this garden, there is neither water nor plants - only stones and sand. But thanks to strict discipline and the precise arrangement of elements, the garden creates a sense of harmony and beauty. The Japanese educational system is such a rock garden. It creates "beauty" (high results, disciplined workers), but at the cost of incredible tension and the restriction of freedom. And, as in a rock garden where every stone has its place, in a Japanese school, every student knows their place in a rigid hierarchy.

However, in the 1990s, the system began to crack. The economic bubble burst. Society faced new problems: student burnout, a rise in the number of school refusers (hikikomori), juvenile delinquency, and a "lost generation." It became obvious that "examination hell" does not prepare people for life in a rapidly changing world [2].

In response to these challenges, the Japanese government initiated reforms that became, perhaps, the most radical in the modern history of education. First - "relaxed education" (yutori kyōiku), which was supposed to give children more freedom and develop their "ability to live" (ikiru chikara). Then - a rollback from these reforms after the "PISA

shock" of 2003. And finally - a new cycle of reforms that attempts to find a balance between academic knowledge and the development of 21st-century competencies [1]. This path - from "hell" to "freedom" and back - I consider one of the most instructive in world educational history. It shows that educational reforms are not just a change of curricula. It is a change of culture. And this change requires time, resources, patience, and - most importantly - an understanding of what exactly we want to develop in children [2].

Historical Context and Reasons for Reforms

To understand Japanese reforms, it is necessary to understand the system they tried to change. As researchers note, "modern school education in Japan" after the Second World War was built around one goal: successful passing of university entrance exams [2]. This system had several key characteristics. First, centralization: the Ministry of Education, Culture, Sports, Science and Technology (MEXT) defined uniform national standards, curricula, and assessment methods. Second, competition: admission to a prestigious university determined one's entire future career, and this competition began as early as elementary school. Third, rote learning: the system required the mechanical memorization of huge volumes of information, rather than the development of thinking [2]. As the OECD notes, "in Japan, the Ministry of Education (MEXT) reduced the content of the curriculum in 1998, following a trend toward curriculum reduction that began as early as 1977" [4]. This reduction was a response to "growing concerns among students and parents about curriculum overload, increased competition for university entrance, and a rise in the number of students falling behind."

However, the true catalyst for reform was the social crisis of the 1990s. As the study notes, "in the 1980s, various problems in Japanese school education intensified, such as school violence, bullying, and school refusal" [2]. The economic bubble burst in 1991, and Japan entered a period of prolonged stagnation, later called the "Lost Decade." Society faced new problems: the number of young people who could not find jobs, did not want to study, and saw no meaning in life grew. The phenomenon of hikikomori emerged - young people who voluntarily isolated themselves from society, not leaving their rooms for years. As the study notes, "at the same time, rapid internationalization and global problems required a type of thinking that traditional, knowledge-transmission-based education could not provide" [2]. It became obvious: a system that worked brilliantly in an era of economic growth had stopped working in an era of stagnation. A new model was needed [1].

Content of the Reforms

In 1998-1999, the Japanese Ministry of Education carried out a large-scale reform that became known as "yutori kyōiku" - "relaxed education" or "education with freedom." As Peter Cave notes in his research, the 1998-1999 reform was a "competency-added revision" [1]. It did not abolish subjects, but added new goals to them - the development of abilities that go beyond individual disciplines. Key elements of the reform included a 30% reduction in curriculum content (as the OECD notes, "the reform reduced both curriculum content and learning time by selecting and reducing subject content to create more time for improving the quality of learning" [4]); the introduction of a "period of integrated study" (sōgō-teki na gakushū no jikan) - time for project work, research, and the development of "living power"; a transition to a five-day school week (complete abolition of Saturday classes); and a focus on developing the "ability to live" (ikiru chikara) - the ability to learn, think, and solve problems independently [1]. As Hiroshi Sato notes in his analysis, "yutori" is a word that usually has a positive meaning in Japanese, meaning "comfortable" or "free" [2]. However, in the context of education, it acquired a negative connotation. The reform was to be fully implemented by 2002. However, already in 2002, when the reform had just begun to take full effect, a scandal broke out.

In 2003, the results of the international PISA assessment were published. And they became a shock for Japan. As the study notes, "the Japanese educational system, which had demonstrated outstanding results, experienced a 'PISA shock' in 2003 and again in 2006" [6]. The results were disappointing: "in PISA 2003, Japan, except for science where it ranked 2nd, dropped to 6th in mathematics and 14th in reading; in 2006, the ranking in all three subjects continued to fall." Particularly alarming was the drop in reading: "Japanese students fell from 8th place in the world in 2000 to 14th in 2003" [6]. Researchers also note that "between 2003 and 2006, there was a decline in mathematics achievement" [5].

The reaction of society was immediate and harsh. As the OECD notes, "this criticism was fueled by Japan's results in PISA 2003, which critics found unsatisfactory" [3]. "Yutori kyōiku" was named the culprit. As the study notes,

"the 1998 reform was criticized by various stakeholders, including experts, parents, and the media, and raised citizens' concerns about declining academic standards." The reform, which was supposed to give children freedom, was declared the cause of falling educational standards. In response to the criticism, the Ministry of Education began a gradual rollback from "yutori." As Peter Cave notes, as early as 2008-2011, the next reform was carried out, which partially restored the curriculum content [1]. Researchers note that "in response to the 2003 'PISA shock', new reforms were initiated" [3].

In March 2008, the Ministry of Education announced new curricula for elementary and junior high schools, which were to be implemented from April 2011 [4]. The 2008 reform was a partial return to the old model. As the OECD notes, "the 2008 national curriculum standards reform led to an expansion of curriculum content compared to the 1998 reform." "The 2008 curriculum reform increased both knowledge-and-skills-related content and learning time to allow more time for reviewing lessons, conducting observations and experiments, and writing reports" [4]. However, the concept of "ikiru chikara" ("ability to live" or "zest for living") was preserved and even strengthened. As the study notes, "the new curriculum also emphasized 'ikiru chikara' (competencies for active living or zest for living) as the central idea of the curriculum reform." The concept of "ikiru chikara" was defined as "the competency to find tasks independently, make decisions and act autonomously, and solve problems effectively" [4]. This was an attempt to find a balance between academic knowledge and the development of thinking [1].

The next cycle of reforms, which began in 2017-2018, represented, in the words of Peter Cave, a transition from a "competency-added revision" to a "competency-integrated revision" [1]. As Cave notes, "the latest revision seeks to resolve the tension between competencies and subject content by developing broader abilities through specific approaches offered by different subjects." In other words, instead of adding "competencies" as something separate from subjects, the reform attempts to embed them into subject learning itself [1]. As the OECD notes, "the new curriculum (to be implemented from 2020 to 2022) focuses on using active learning strategies to develop student competencies around three pillars: motivation to learn and applying learning to life; acquisition of knowledge and technical skills; thinking, decision-making, and self-expression skills" [3].

For the CCFP model, the Japanese experience is important precisely because of this evolution - from "adding competencies" to "integrating competencies." This is a step forward compared to Finland, where competencies remain "transversal" and are not embedded in the subject. But here, too, there is a fundamental limitation: "competencies" remain general, vague categories that do not have an operational definition and are not diagnosed as separate units. The mental mechanisms discussed in my model are specific tools of thinking, each of which can be diagnosed, evaluated in dynamics, and purposefully developed [8], [9]. Japan took a step from "knowledge transmission" to "competency development" and even attempted to integrate competencies into the subject. But it did not take the next step - from "competencies" to "mental mechanisms." It is precisely this step that constitutes the essence of the CCFP model.

Positive Experience and Achievements

The Japanese educational system demonstrates impressive results that cannot be ignored. Despite the "PISA shock" of 2003 and 2006, Japan remains one of the world's leading educational systems. As the OECD notes, "Japanese 15-year-old students have been among the top performers since the inception of the PISA program." "In PISA 2015, 15-year-old Japanese students were in the top decile in science, mathematics, and reading" [7]. Researchers also note that "adults in Japan have the highest level of literacy and numeracy proficiency among participating countries" [7]. This shows that the Japanese educational system not only yields good results in school but also forms skills that are retained throughout life.

As the OECD notes, "one of the key features explaining the success of the education system in Japan is the effective provision of holistic (comprehensive) education for children: teachers are qualified and care well for students as a whole; students are engaged and work collaboratively; parents prioritize learning and finance additional out-of-school learning (juku); and communities support learning" [7]. Japanese reforms reflect the evolution of global pedagogical thought. As Peter Cave notes, "since the late 1980s, revisions of school curricula in Japan have sought to promote abilities and qualities that go beyond subject boundaries and are often referred to as 'competencies' in international educational discourse" [1]. The transition from "adding competencies" to "integrating competencies" shows that Japanese reformers are learning from their mistakes and trying to find more effective ways to develop thinking. And, finally, as the OECD notes, "the socio-economic status of students does not have a strong influence on PISA results

in Japan" [7]. This is an important achievement: the Japanese education system, despite all its problems, remains relatively equitable.

For the CCFP model, these achievements are not just "positive experience," but conditions of possibility. Outstanding PISA results, holistic education, the evolution of pedagogical thought, and the relatively low impact of socio-economic status - all this creates an environment in which the formation of mental mechanisms becomes possible [8]. But a condition of possibility is not the same as a sufficient cause. Japan created the environment but did not create a system for diagnosing and developing specific mechanisms. Moreover, "examination hell" - the central institution of the Japanese system - works against these achievements, orienting students toward memorizing facts rather than developing thinking. This is precisely why Japan's achievements remain fragile: they are held together by cultural tradition and a holistic approach, but are not supported by the technology of forming a cognitive apparatus.

Negative Consequences and Challenges

However, behind these impressive achievements lie deep problems and contradictions. The most noticeable and painful consequence of the reforms was the drop in PISA results. As the study notes, "Japanese students performed well, but between 2003 and 2006 there was a decline in mathematics" [5]. Particularly alarming was the drop in reading: "in the 2006 PISA study, Japan dropped from 14th to 15th place in reading skills compared to the previous 2003 study" [6]. This drop was perceived as a direct consequence of "relaxed education." As the study notes, "the problem was that 15-year-old Japanese students showed decreased motivation to study mathematics and science, and they do not want to build future careers in mathematics and science" [5].

The second alarming consequence is the growth of inequality. As the study notes, "in Japan, there is an achievement gap, and tracking leads to a differentiated school experience" [5]. The problem of the middle class leaving public schools for private ones became especially acute. As the study notes, "relaxed education" reforms led to the fact that "parents who did not trust the reforms decided to send their children to private schools" [2]. This led to "an increase in educational inequality both in terms of family background and cognitive abilities."

The third problem is the crisis of student well-being. As the study notes, "the academic stress arising from such competition has led to a large number of students developing psychological disorders, self-hatred, and suppressed personalities" [2]. Particularly alarming is the phenomenon of hikikomori - young people who voluntarily isolate themselves from society. Although this phenomenon has multiple causes, many researchers link it to the pressure of the educational system.

The fourth problem is misunderstanding and resistance from teachers and parents. As the OECD notes, "the 1998 reform did not implement sufficient measures to achieve its important goal. Information was not widely disseminated, and there were not enough instructional hours for each subject to consolidate the relevant knowledge and skills." As the study notes, "the 1998 reform was criticized by various stakeholders, including experts, parents, and the media" [3]. Teachers were not properly prepared for new working methods. Parents did not understand the goals of the reforms and demanded the preservation of the familiar learning format [2].

The fifth and, in my view, the most fundamental problem is the gap between declarations and practice. As the OECD notes, "university entrance exams, which currently prioritize knowledge and memorization, continue to have a disproportionate influence on what actually happens in Japanese classrooms" [3]. The OECD warns: "If the design of the university exam is not aligned with the central learning goals of the new curriculum, it will hold back the entire education system, narrowing the scope of what is valued and taught, which means that changes in classrooms and the development of student competencies are likely to be minimal." This observation echoes what I have already described in other articles: the examination system is the main brake on educational reforms [2]. As long as exams require rote memorization of facts, the school will teach rote memorization of facts, not the development of thinking.

The analysis of the "yutori" discourse itself deserves special attention. As Hiroshi Sato notes, "in Japan, it is not uncommon to hear statements such as 'yutori education failed', 'the yutori generation has low academic abilities', and 'the yutori generation is selfish'" [2]. However, Sato questions these statements. His research shows that "the criticism of yutori education and the yutori generation was incorrect." He notes that "yutori" is a word that usually has a positive meaning, but in the context of education, it was used to create a negative image [2]. This is an important observation. The discourse of "yutori failure" was largely constructed by the media and used for political purposes.

As the study notes, "the criticism faced by the yutori reform was closely related to external pressure from outside the country."

For the CCFP model, these negative consequences are not just "problems of the Japanese school." They are symptoms of a deeper phenomenon: a reform that changes declarations and structures, but does not change the cognitive apparatus of the participants, inevitably reproduces the old paradigm [8], [9]. The drop in PISA, the growth of inequality, the crisis of student well-being, teacher resistance, the gap between declarations and practice - all these are consequences of the fact that the Japanese reform did not place the diagnosis and development of specific mental mechanisms at the center. It changed the "what" and "how" of education, but did not change the "with what" - the cognitive tool used by both the teacher and the student. Moreover, "examination hell" - the central institution of the Japanese system - actively reproduces a cognitive apparatus inadequate for solving "hard problems" [8].

Contradictions with the CCFP Model

Now I want to move on to what is most important to me: the fundamental differences between the Japanese model and the communicative-cognitive framework of personality (CCFP) model [8], [9]. The first and most fundamental difference: the Japanese model operates with the concept of "competencies," while mine operates with the concept of "mental mechanisms." At first glance, these concepts may seem similar. Both are abilities that should be developed in school. However, there is a fundamental difference between them [9]. Competencies are general, transversal abilities that "permeate" all subjects. They do not have a clear structure, are not diagnosed as separate units, and do not have assessment criteria [1]. As Peter Cave notes, Japanese reforms moved from "competencies added to subjects" to "competencies integrated into subjects." But in both cases, competencies remain an "appendage" to subjects, rather than an independent goal of education. The mental mechanisms that I propose are specific, operationally defined tools of thinking: establishing cause-and-effect relationships, critical thinking, Socratic dialogue, spatial imagination, forecasting, and others [9]. Each of them can be diagnosed, evaluated in dynamics, and purposefully developed [8]. The Japanese model lacks a systematic approach to diagnosing these mechanisms. There is no understanding that the development of thinking is not a "background" or "addition" to subjects, but the central task of education.

The second difference: the Japanese model remains exam-centric. As the OECD notes, "university entrance exams, which currently prioritize knowledge and memorization, continue to have a disproportionate influence on what actually happens in Japanese classrooms" [3]. Even after all the reforms, even after the introduction of the "period of integrated study" and "living power," exams remain the main factor determining the content of education. As the OECD warns, if exams are not reformed, "changes in classrooms and the development of student competencies are likely to be minimal." My model proposes dynamic diagnostics instead of static exams [8]. I propose evaluating not a static level of knowledge, but progress - the dynamics of the development of each of the eleven mental mechanisms [9]. This allows us to see not only "what" the student knows, but also "how they think" and "how they are changing."

The third difference: the Japanese model remains uniform. All students must study the same things, take the same exams, and meet the same standards [3]. Even the "period of integrated study" was embedded in a uniform system [4]. My model, on the contrary, is built on individualization [9]. Every child is unique, and their unique abilities should become the "entry point" for the development of all other mental mechanisms. The school should not unify, but identify and develop what makes each child special.

The fourth difference: the Japanese model is deeply rooted in cultural conservatism [2]. The Confucian tradition, respect for the teacher, the importance of exams as a mechanism of social mobility - all this creates a powerful conservative barrier. Japanese reforms tried to overcome this barrier, but ultimately failed. "Yutori kyōiku" was rolled back, "ikiru chikara" remained at the level of rhetoric, and the examination system remained intact [3]. My model, on the contrary, implies radical pedagogical innovation [9]. It requires a revision of the teacher's role (from transmitter to facilitator), the student's role (from passive recipient to active researcher), and the role of assessment (from static checking to dynamic diagnostics).

And finally, the most important difference. The Japanese model, like most other educational models, does not realize the epistemological significance of developing thinking [8]. As I substantiated in the article "Epistemological Recursion in Cognitive Science," modern neuroscience is stuck in the "trap of correlations": we record the results of brain activity, but we do not understand the mechanism of its self-organization. The way out of this dead end lies not

in the plane of creating even more powerful scanners, but in the plane of the evolution of the knowing subject itself. The Japanese model does not set itself this task [3]. It does not understand that the development of mental mechanisms in children today is the preparation of the very cognitive apparatus that tomorrow will be able to deconstruct the logic of its own brain. It remains within the framework of pedagogy, without reaching the level of epistemology [9].

It is precisely here that the Japanese experience leads us to the key distinction that I discuss in detail in the article on epistemological recursion [8]. The hard problem is not a problem of missing data, but a problem of an exhausted conceptual framework. Japan tried to solve the problem of education within the existing framework - through "relaxed education," "living power," and "integration of competencies." But the framework remained the same: the school still prepares thinkers with linear, reductionist thinking, rather than subjects capable of an act of re-conceptualization [9]. For the CCFP model, this means: the Japanese experience shows the boundaries of reforms that do not reach the epistemological level.

Conclusions and Lessons

What can we take away from the Japanese experience? The first lesson: educational reforms cannot be rushed and unprepared. The Japanese reform of 1998 was ambitious but poorly prepared. As the OECD notes, "it did not implement sufficient measures to achieve its important goal. Information was not widely disseminated, and there were not enough instructional hours for each subject to consolidate the relevant knowledge and skills" [3]. Teachers were not prepared, parents were not informed, and resources were not allocated.

The second lesson: educational reforms cannot ignore the cultural context. Japanese reformers tried to introduce "Western" ideas about freedom and individualization into a culture that has been built for centuries on respect for authority and the importance of exams [2]. This does not mean that changes are impossible. But they require time, patience, and consideration of local characteristics.

The third lesson: the examination system is the main brake on educational reforms. As long as exams determine the entire content of education, reforms remain at the level of declarations [3]. Japan introduced a "period of integrated study," but left exams intact. And the exams "outweighed" all the reforms.

The fourth, and most important lesson for me: without a systemic approach to the development of thinking, any reforms remain cosmetic [8]. Japan introduced "competencies," but did not create a system for their diagnosis and development. It proclaimed "living power," but did not give teachers the tools to develop it [4]. It tried to find a balance between knowledge and thinking, but this balance turned out to be unstable.

Here I would like to recall the famous haiku by Matsuo Bashō: "Old pond. A frog jumps in. The sound of water." Japanese educational reforms remind me of this frog. They jumped into the water of the old pond, created a splash, noise, and movement. But the pond remained the same. The water calmed down, and the ripples disappeared. The reforms of "yutori" and "ikiru chikara" were a splash that did not change the very nature of the pond. The pond is the examination system, cultural tradition, and the deep structure of education. And as long as this structure remains unchanged, any reforms will only create temporary ripples on the surface.

Japan has shown us that educational reforms are possible even in a country with the deepest traditions of educational conservatism [2]. But it has also shown that without changing the paradigm itself - from exam to development, from uniformity to individualization, from rote learning to thinking - these reforms remain superficial and reversible [3]. It is precisely this paradigm shift that the CCFP model offers [9].

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