

“Creativity” in Japanese Education Policy

Cameron Smith

Aichi Gakuin University

Reference Data:

Smith, C. A. (2018). “Creativity” in Japanese education policy. In P. Clements, A. Krause, & P. Bennett (Eds.), *Language teaching in a global age: Shaping the classroom, shaping the world*. Tokyo: JALT.

This paper looks at references to creativity in key Japanese education policy documents from the Meiji era to the present day, with a particular focus on the postwar and postbubble periods. Supporting “creativity” has become a priority in education policy around the world, including Japan, particularly as a response to globalisation. However, in such contexts it typically remains poorly defined and explained, despite work in other research areas, notably psychology and business studies. In this paper I argue that in Japanese education policy discussions, creativity has typically been cited as a means to recover a suppressed national character or vitality. Conversely, the recently introduced concept of “zest for living” does appear to reflect creativity as understood by creativity research. I argue that the lack of clarity regarding creativity gives educators interested in creativity the opportunity to guide their institutions’ response to Ministry pressure for education reform.

本論文は、明治時代から今日まで、日本の教育方針要項などに論及されている創造性に関する文献を考察するもので、特に戦後およびバブル期後を中心に考察する。創造性教育の推進は、特にグローバル化の影響を受け、世界中の教育政策において、その重要性がより高まって来ている。とりわけ心理学や経営学では積極的に採用されているが、大抵の分野において創造性に関する扱いは不明瞭のままである。この論文では、日本の教育方針審議において言及されてきているが、創造性が本来の日本人らしさや日本人の活力を取り戻すことに貢献するという点について論じていく。また、最近話題の『生きる力』のコンセプトは、創造性研究の理解が反映されたものと思われる。創造性について不明瞭であることが、かえって文科省の教育改革推進の流れに、創造性教育に積極的な教師達によって応える機会を生み出すことにつながっていることについても取り上げる。

Creativity has become increasingly salient in education policy around the world, including Japan, typically as a labour-market-focused response to globalisation and as a challenge to test-based education (Kapitzke & Hay, 2014). In language teaching, it has received increasing attention as a way to capture the essentially creative nature of language use, improve teaching and motivation, and thereby improve acquisition, with a recent spate of publications demonstrating growing interest.

Amid ongoing calls for schools and universities to foster student creativity, education stakeholders are seeking ways to respond. This paper examines the use of the term *creativity* in Japanese education policy discussions and documents and suggests an opportunity for educators to guide their institution’s response to pressures for reform.

Concerns About Creativity in Japan

Japanese policy makers have been increasingly concerned with creativity for several country-specific reasons, in addition to the pressures of globalisation. First, the 1980s’ end of the “catch-up” period of economic growth based on rapid industrialisation and efficient dissemination of Western technologies and the early 1990s’ bursting of the “bubble” heightened long-term concerns about native innovation (Rappleye & Kariya, 2011). Second, starting in the 1980s, regimented education was blamed for a perceived breakdown in social discipline that greater freedom to be creative would address (Hood, 2001). Lastly, particularly following the disasters of 2011, there has been a view that Japan needs to innovate new social and economic values to overcome its malaise (MEXT, 2014). Regular surveys by the Institute of Statistical Mathematics indicate that Japanese do not see themselves as creative/inventive (*dokusousei ni tomu*; Nakamura, Tsuchiya, & Maeda, 2015, p. 144), despite comparative evidence from PISA tests that Japanese students (along with students in other East Asian countries) excel in creative problem solving (OECD, 2014).

Creativity Research Analytical Framework

To understand whether policy makers have successfully defined or identified creativity, we need to understand what creativity is. Surprisingly, despite receiving increasing attention, creativity is typically poorly if at all defined in general and language education literature and policy (Smith, 2016), with the recent (and excellent) volume by Maley and Kiss (2017) possibly the first serious book-length attempt by language education researchers to engage fully with creativity research. Here I present three analytical frameworks from creativity research to guide the reader: the definition of creativity, aspects of creativity (the “five Ps”), and the cognitive creative process.

In creativity research, there is a largely settled definition of creativity: that which leads to new (original, unique) and useful (valuable, appropriate) products (Mumford, 2003). This definition applies across all domains (literature, science, history, etc.) according to how each domain assesses value. It can apply to all levels of originality, from the personal and everyday, through professional to world-historic contexts (Kaufman & Beghetto, 2009). As explained below, this definition also helps to highlight differences in conceptions of creativity in different cultures.

According to Kozbelt, Beghetto, and Runco (2010), we may distinguish between five aspects of creativity: *person* (individual creative potential and traits of creative people), *process* (cognitive stages of creativity), *place* (environment, including incentives and management), *product* (what items are considered creative), and *persuasion* (ability to persuade others your product is creative). Our focus on education policy means we are interested in the first three listed aspects of person, process, and place. Policies may seek to identify, nurture, and exploit creative talent (for example in giftedness or leadership programmes); maximize future creative potential through cultivating creative thinking skills; or foster creative behaviour in the classroom.

A simple model of the creative cognitive process involves divergent and convergent thinking: generation of ideas and then evaluation of those ideas. Creativity tests typically assess these skills, largely focusing on divergent thinking (imagining uses for a brick, completing half-done line drawings, etc.). However, such tests have poor predictive value for future creativity (Kaufman, Plucker, & Baer, 2008); a more comprehensive framework is necessary to capture the whole process. A common starting point is Wallas’ 1926 model of *preparation* (analysis of the problem); *incubation* (defocused attention); *illumination* (insight); and *verification* (assessing the insight). This stage approach has led to researchers highlighting the importance of other stages such as problem sensitivity

(awareness that a problem exists), problem framing (posing the question), execution (perseverance and skill), recursion (solution review), and so on (Lubart, 2001). Figure 1 shows a model of the creative cognitive process that, although not exhaustive of the literature on stage analysis of creativity, helps to illustrate the complexity of creative cognition. It also helps in grasping the issue of domain specificity dealt with in the next section. It is a diagram we shall revisit towards the end of the document survey.

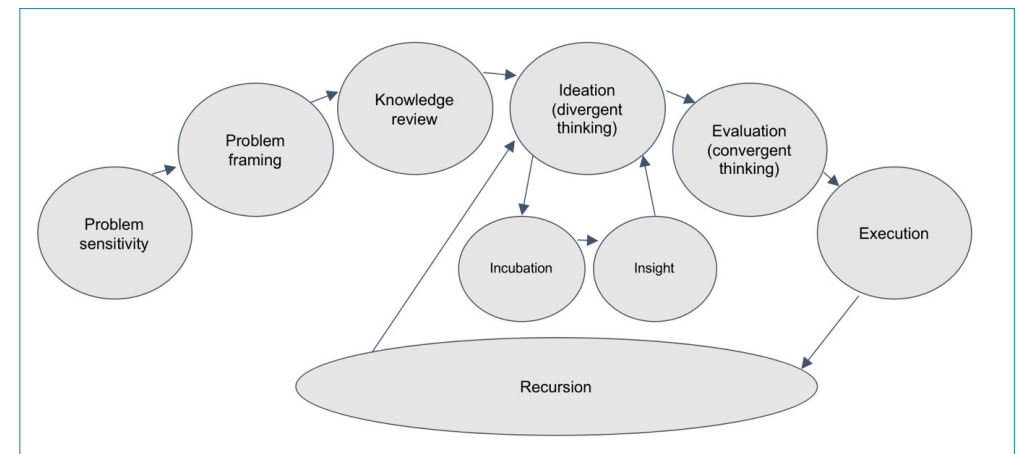


Figure 1. An illustrative stage model of the creative cognitive process.

Domain Specificity of Creativity and the Importance of Domain Knowledge

Although creativity training programmes worldwide promise to improve general creative potential, creativity does not appear to be a general aptitude (Baer, 2015). That is, creativity in one domain (say, physics) does not predict creativity in another (say, history). Creative polymaths exist but are as rare as expected if creativity is not a general skill. Furthermore, the ability to be creative appears to depend on one’s domain knowledge—typically formal education in a subject. Figure 1 shows many stages where domain knowledge may help: awareness of problems, ability to frame problems, knowledge resources, and so on.

As Baer remarked, domain specificity has repercussions for education policy. First, creativity in art or in science is improved through creative education in those disciplines

Smith: “Creativity” in Japanese Education Policy

rather than general creativity training. Second, interdisciplinary training becomes more, not less, important. If creative thinking skills are domain specific, then problems lying across disciplines require familiarity with both disciplines and practice in integrating them. Thus interdisciplinary training may rightfully be seen as part of a policy that encourages creativity.

Creativity and Culture

The frameworks outlined above also help to understand variations in the conception of creativity in different cultural contexts (Helfland, Kaufman, & Beghetto, 2016). In Smith (2016), I argued that such frameworks enable us to uncover Western (particularly Anglo-American) prejudices about creativity: From specific historical circumstances, we tend to view creativity as “something like a spirit that can come from within an individual that produces newness and difference, that is disruptive, that is self-liberating, and that is natural” (p. 46). That is, we emphasise creativity as individualist, anti-authoritarian, and always good, with a particular emphasis on divergent thinking as the essence of creativity.

By contrast, in East Asian cultures there is evidence that the social or moral worth of creative products is part of their value, but disruptiveness is not (Niu & Sternberg, 2006). Thus creativity in the Japanese context may have a social as well as an individual focus, and the positive view of disruptive creativity in the West may not necessarily apply to non-Western cultures.

Of course, Japan has also been influenced by Western discourse. After the end of isolation in the later 1800s came rapid acquisition of Western technology and ideas, and the postwar constitution was written in the Western democratic tradition specifically to undermine and supplant the authoritarianism that had developed from the Meiji restoration to World War II. Thus, in Japan we may expect—and will see—an interplay between nativist and Western-style ideas of creativity.

Historical Survey

The document analysis presented here considers framework documents such as basic laws and key policy reports, as well as their historical context, to assess the salience of creativity in education policy. It looks at how creativity (typically *souzousei* or *souzouryoku*—terms recognized as equivalent to creativity in Japanese creativity research) is defined and used. It also considers other concepts used in these documents that might rightly be identified as promoting creativity without identifying it as such, with reference to the summary of creativity research frameworks I provided above.

From Meiji to the Second World War

The Imperial Rescript on Education, issued in 1890, expounded the basic principles of Japanese education until Japan’s defeat and occupation 55 years later. It exhorted morality, intellectual development, and dedication to the public good: “Should emergency arise, offer yourselves courageously to the State; and thus guard and maintain the prosperity of Our Imperial Throne coeval with heaven and earth.” It was written partly in reaction to early Meiji rapid westernisation (the 1868 Charter Oath had encouraged the assimilation of knowledge from throughout the world), although at the same time it reflected the nationalism of Western imperial powers (Hirakawa, 1989).

However, the westernization—technological modernization—of Japan continued apace into the 1930s. In a school system modelled on French administrative centralism, this largely meant the cramming of Western knowledge. Japanese nationalists inside and outside government began to write and talk of a spiritual crisis where, according to one reform plan “we have displayed an undesirable inclination towards expedient imitation . . . therefore one of the main objectives of the proposed reform is . . . to cultivate a rich creativity and indefatigable intellectual curiosity” (cited in Rappleye & Kariya, 2011, p. 64). Creativity was a means for Japan to discover its unique path in the world.

The Post War: The Fundamental Law on Education and Continued Catch-Up

The postwar American occupation sought to strip Japanese society of prewar militarist and ultranationalist tendencies. The Imperial Rescript was proscribed and the democratisation of education sought, resulting in the “crowning achievement of the early education period”: the Fundamental Law on Education. Article 1 of the law stated that

Education shall aim at the full development of personality, striving for the rearing of the people, sound in mind and body, who shall love truth and justice, esteem individual value, respect labor and have a deep sense of responsibility, and be imbued with the independent spirit, as builders of the peaceful state and society. (Schoppa, 1991, pp. 33-34)

However, although this implied individualism associated with Western-style creativity, postwar governments instead used economic growth and industrial “catch-up” as legitimating goals. This effectively wiped from collective memory preoccupation concerns with Japanese creativity (Rappleye & Kariya, 2011).

Accordingly, fears over a lack of Japanese creativity again began to emerge, particularly in the 1960s as the postwar miracle was in full swing. One government policy paper

Smith: “Creativity” in Japanese Education Policy

stated that “it would not be wrong to say that up until now our talent has been a talent for imitating the advanced countries . . . consequently, this is not an abstract issue, but an economic and skills need,” and others focused on the need to encourage high talent and better fostering of individuality (Yumino, 2005p. 4).

Nakasone and the 1980s Crisis in Education

By the 1980s, two other factors began to impel Japan towards fundamental changes in education. One was a perception of a breakdown in school discipline, with rising juvenile violence and dropout rates blamed on rigidity and uniformity (Beauchamp, 1987). The other was the rise of nationalism, personified by Prime Minister Nakasone, that sought a confident Japan: internationalist, but with a love of country, with “freedom, creativity and a joy of life” (Hood, 2001, p. 55).

Nakasone convened an Ad Hoc Council on Education. The four reports it issued reflect the tensions between nationalist politics, the business community, and the more progressive teaching profession. The word *individuality* (個性, *kosei*) was prominent in its critiques of postwar educational rigidity (Takayama, 2009). Individuality could be interpreted by each camp: the ability to explore one’s Japanese identity and love of country, a more flexible and creative worker, or a more humanistic pedagogy. Creativity in the final report was directly connected to individuality: Individuality was a necessary condition for authentic creativity. Although creativity was not formally defined, it was associated with going beyond rote learning to the appropriate use of knowledge and thinking for oneself. This connection between creativity and individuality as a strategy of blurring nationalist and progressive agendas repeatedly appears in the speeches of nationalist prime ministers into the 2000s (Rear, 2011). Creativity at all times was used to mean a property of individuals.

Yutori Education

The reform drive resulted in what became known as *yutori* (relaxed, or “room to grow”) education—both a philosophical approach and a concrete set of initiatives (Bjork, 2011). The philosophy emphasised giving children freedom to develop individuality and creativity and to enjoy study and play. Policy involved the slow reduction of days and hours (Japan had had a 6-day school week until the 1990s), the introduction of integrated studies, the expansion of electives, and the encouragement of “zest for living” (*ikiru chikara*) and innovative pedagogy. Here, creativity is framed as an innate property suppressed by regimentation, rote learning, and uniformity: in effect a

negative definition that could accommodate different interpretations. On the other hand, *integrated studies* does address, although not in name, Baer’s suggestion that interdisciplinary thinking skills support creativity.

The introduction of *yutori* education was met with criticism regarding falling standards. Much of this criticism was misplaced given the short time the policy had been in effect and the patchiness of its implementation, particularly in junior high schools (Bjork, 2011). However, the 2003 “PISA shock,” when Japan’s 15-year-olds suddenly dropped in international rankings, undermined its legitimacy and allowed a government uncomfortable with liberal ideas to push a more conservative, standards-based agenda (Takayama, 2014). *Yutori* policy was halted (although what had been implemented was not removed) and then formally abandoned as a goal, to be replaced by the new Basic Law on Education. However, the concept of “zest for living” remained and began to take on greater prominence.

2006 Basic Law on Education and the Basic Plans

Reflecting a more assertive nationalism, in 2006 the new Basic Law on Education (MEXT, 2006) was passed to replace the 1947 Fundamental Law. It emphasized the connection between individuality and creativity as well as the strengthening of Japanese cultural identity and loyalty. The text called for education that

values the dignity of the individual, that endeavors to cultivate a people rich in humanity and creativity who long for truth and justice and who honor the public spirit, that passes on traditions, and that aims to create a new culture. (MEXT, 2006)

It stated as aims

developing individuals’ abilities, cultivating creativity, and fostering a spirit of autonomy and independence by respecting the value of the individual, as well as emphasizing the relationship between one’s career and one’s everyday life and fostering the value of respect for hard work. (MEXT, 2006)

Here, creativity is again attached to a (re)discovery and renewal of Japanese cultural identity.

The new law obliged the government to produce basic plans outlining how the aims of the law would be met. The first basic plan (MEXT, 2008) was preoccupied with moral and social decline and the improvement of academic standards. It barely mentions creativity, and its discussions of individuality seem more concerned with valuing individuals: making sure every child receives appropriate education including a sense of public duty.

However, it also emphasizes “zest for living,” about which I shall write more below.

The second report (MEXT, 2013) bore the trauma of the disasters of 2011. It emphasized stagnation, demographic crisis, deindustrialisation. Its broad solution was stated in the first line: “What is truly needed in Japan is independent-minded learning by individuals in order to realize independence, collaboration, and creativity.” The approach is summarized in a diagram from a 2012 white paper shown in Figure 2.

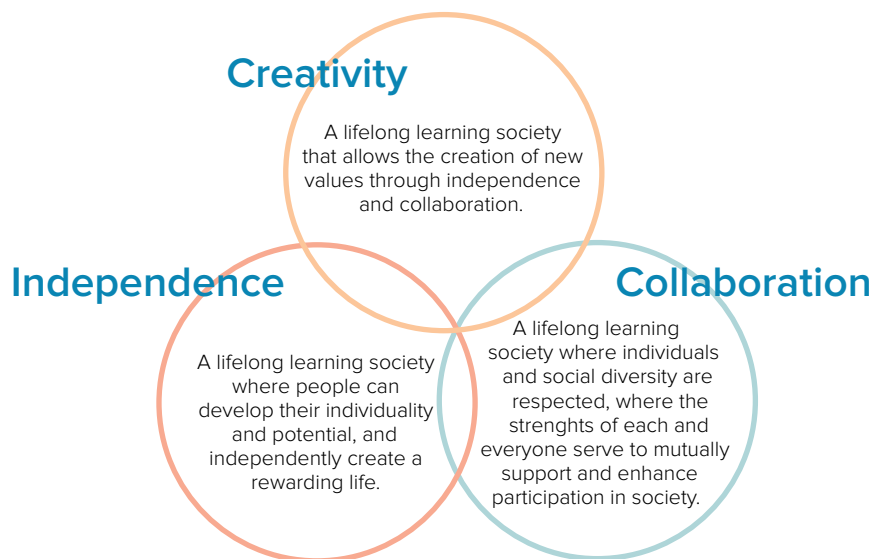


Figure 2. Model for independence, collaboration, and creativity (from MEXT, 2012).

Finally, creativity is given a clearer definition—the creation of new (social and economic) values. However, even with creativity now at the forefront of policy, there is no analysis of what creativity involves and what helps it thrive. “Achievement indicators” designed to assess the development of these three competencies fail to list anything recognizably reflective of creativity except perhaps “the ratio of persons who have learned to cope with modern and social problems.”

Zest for Living—Creativity by Another Name?

On the other hand, another concept has increasingly grown in clarity since its origins in the 1990s: “zest for living,” defined by the Central Council for Education:

It was clear to us that what our children will need in future, regardless of the way in which society changes, are the qualities and the ability to identify problem areas for themselves, to learn, think, make judgments and act independently and to be more adept at problem-solving. We also felt that they need to be imbued with a rich sense of humanity in the sense that while exercising self-control, they must be able to cooperate with others, have consideration for their needs and have a spirit that feels emotion. It also goes without saying that if they are to lead vigorous lives, a healthy body is an indispensable requirement. (Cited in MEXT, 1996)

Following the discrediting of *yutori* education, “zest for living” began to evolve to meet concerns about basic educational standards (Takayama, 2014). In the 2008 basic plan, zest for living is used to stress fundamental and basic knowledge and skills, the ability to think logically and pass judgements in order to solve problems, and learning voluntarily. In the 2013 second plan, it became even clearer. For example, in reference to higher education, the plan gives three objectives to support zest for living:

1. To discover unsolved issues, then obtain specialized knowledge and general abilities and think in order to arrive at the best solution;
2. To gain the required skills and abilities, supported by intellectual fundamentals, born of high quality and efficient education in conjunction with practical training and experiential activities; and
3. To recognize that, in a globalizing industrialized society, English and media literacy are becoming indispensable. (MEXT, 2013)

If we revisit the discussions of creative cognition (Figure 1) and domain competence, we can see something that begins to resemble creativity: problem sensitivity and framing, knowledge review, idea generation and evaluation, execution—all supported by domain knowledge. “Zest for living” may arguably represent the outline of a coherent policy on creativity in education.

Smith: “Creativity” in Japanese Education Policy

Discussion

Creativity in Japanese education policy is almost always used narrowly as a property of individuals and as either a general value-creating skill or an act of self-expression. It is unclear whether creativity is considered innate or a skill that can be taught. Although at times creativity has taken on the Western sense of humanistic individualism, it has more frequently been presented as a source of social and cultural renewal and revitalisation, reflecting research into East Asian conceptions of creativity that stress social value. Ultimately, interplay between competing political pressures on education policy from nationalists, business, and to a lesser extent, progressive educationalists has resulted in ambiguity over its meaning.

However, this ambiguity and lack of definition presents an opportunity for language professionals in education who want to support creativity. Not only is creativity poorly defined, no detail is given in policy documents on key aspects of creativity, such as how to foster it or what environments support it beyond the absence of regimentation. This not only gives institutions freedom to define their own responses to the exhortation to creativity coming from above but also empowers those within the institution who know how to respond. Moreover, the concept of zest for living, whether by accident or design, supports an evidence-based approach to supporting creativity: solid knowledge base alongside an implicit understanding of the cognitive creative process. Crucially, in higher education, English language is given a leading role in promoting zest for life. Thus, to the questions “*what* is creativity, *what* is zest for life, and *how* do we promote them?” it is possible for language educators serious about creativity to take the initiative and put forward a strong, evidence-based response, solving the problem for the institution as well as achieving their own policy ends.

Conclusion

Creativity has been a consistent concern in Japanese education over the past hundred years, in particular as a reaction to a regimented educational system designed primarily for the material enrichment of the country. Its lack of definition in policy, alongside the promotion of zest for living, gives educational institutions the opportunity to shape their creativity policies in a way that reflects the findings of creativity research.

Bio Data

Cameron Smith is a lecturer at Aichi Gakuin University. He taught English in Russia before completing his PhD in Russian health reform at Edinburgh University. He began

teaching in Japan in 2002. His main research interests are the relationship between creativity and language learning, and content and integrated language learning (CLIL). <casmith@dpc.agu.ac.jp>

References

- Baer, J. (2015). The importance of domain-specific expertise in creativity. *Roeper Review*, 37(3), 165-178. <https://doi.org/10.1080/02783193.2015.1047480>
- Beauchamp, E. R. (1987). The development of Japanese educational policy, 1945-1985. *History of Education Quarterly*, 27, 299-324.
- Bjork, C. (2011). Imagining Japan’s “relaxed education” curriculum: Continuity or change. In D. B. Willis & J. Rappleye (Eds.), *Reimagining Japanese education: Borders, transfers, circulations and the comparative* (pp. 147-169). Didcot, England: Symposium Books.
- Helfland, M., Kaufman, J. C., & Beghetto, R. A. (2016). The four-C model of creativity: Culture and context. In V. P. Glăveanu (Ed.), *The Palgrave handbook of creativity and culture research* (pp. 15-36). London, England: Palgrave Macmillan.
- Hirakawa, S. (1989). Japan’s turn to the West. In M. B. Jansen (Ed.), *The Cambridge history of Japan, volume 5* (pp. 432-498). Cambridge, England: Cambridge University Press. <https://doi.org/10.1017/CHOL9780521223560.009>
- Hood, C. P. (2001). *Japanese education reform: Nakasone’s legacy*. Abingdon, England: Routledge.
- Kapitzke, C., & Hay, S. (2014). The creativity imperative: Implications for education research. In A. D. Reid, E. P. Hart, & M. A. Peters (Eds.), *A companion to research in education* (pp. 281-287).
- Kaufman, J. C., & Beghetto, R. A. (2009). Beyond big and little: The four C model of creativity. *Review of General Psychology*, 13(1), 1-12. <https://doi.org/10.1037/a0013688>
- Kaufman, J. C., Plucker, J. A., & Baer, J. (2008). *Essentials of creativity assessment*. Hoboken, NJ: John Wiley and Sons.
- Kozbelt, A., Beghetto, R. A., & Runco, M. A. (2010). Theories of creativity. In J. C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge handbook of creativity* (pp. 20-47). Cambridge, England: Cambridge University Press.
- Lubart, T. I. (2001). Models of the creative process: Past, present and future. *Creativity Research Journal*, 13(3&4), 295-308. https://doi.org/10.1207/S15326934CRJ1334_07
- Maley, A., & Kiss, T. (2017). *Creativity and English language teaching: From inspiration to implementation*. London, England: Springer International.
- MEXT. (1996). *Japanese government policies in education, science, sports and culture (white paper)*. Tokyo. Retrieved from http://www.mext.go.jp/b_menu/hakusho/html/hpae199601/index.html
- MEXT. (2006). *Basic act on education*. Retrieved from <http://www.mext.go.jp/en/policy/education/lawandplan/title01/detail01/1373798.htm>

Smith: “Creativity” in Japanese Education Policy

- MEXT. (2008). *Basic plan for the promotion of education*. Retrieved from <http://www.mext.go.jp/en/policy/education/lawandplan/title01/detail01/1373797.htm>
- MEXT. (2012). *Education white paper: Special feature 1: Toward implementation of educational rebuilding*. Retrieved from http://www.mext.go.jp/b_menu/hakusho/html/hpab201201/detail/1344908.htm
- MEXT. (2013). *The second basic plan for the promotion of education*. Retrieved from <http://www.mext.go.jp/en/policy/education/lawandplan/title01/detail01/1373796.htm>
- MEXT. (2014). *Kibou no kyouiku* [Hope education]. Tokyo: Toyokan.
- Mumford, M. D. (2003). Where have we been, where are we going? Taking stock in creativity research. *Creativity Research Journal*, 15(2-3), 107-120.
- Nakamura, T., Tsuchiya, T., & Maeda, T. (2015). *Kokuminsei no kenkyuu dai 13 ji zenkoku chousa* [A study of the Japanese national character: The thirteenth nationwide survey]. Institute for Statistical Mathematics: Tokyo.
- Niu, W., & Sternberg, R. J. (2006). The philosophical roots of Western and Eastern conceptions of creativity. *Journal of Theoretical and Philosophical Psychology*, 26, 18-38. <https://doi.org/10.1037/h0091265>
- OECD (2014). *Program for international student assessment (PISA), results from PISA 2012 problem solving: Japan*. Retrieved from <http://www.oecd.org/japan/PISA-2012-PS-results-eng-JAPAN.pdf>
- Rapplee, J., & Kariya, T. (2011). Reimagining self/other: “Catch-up” across Japan’s three great educational reforms. In D. B. Willis & J. Rapplee (Eds.), *Reimagining Japanese education: Borders, transfers, circulations and the comparative* (pp. 51-83). Didcot, England: Symposium Books.
- Rear, D. (2011). Mixed messages: Discourses of education in policy speeches to the Japanese Diet. *Asia Pacific Journal of Education*, 31(2), 129-142. <https://doi.org/10.1080/02188791.2011.566985>
- Schoppa, L. J. (1991). *Education reform in Japan: A case of immobilist politics*. London, England: Routledge.
- Smith, C. A. (2016). Creativity east and west: Preconceptions and misunderstandings. In P. Clements, A. Krause, & H. Brown (Eds.), *Focus on the learner* (pp. 44-50). Tokyo: JALT. Retrieved from <http://jalt-publications.org/node/4/articles/5362-creativity-east-and-west-preconceptions-and-misunderstandings>
- Takayama, K. (2009). Is Japanese education the “exception”? Examining the situated articulation of neo-liberalism through the analysis of policy keywords. *Asia Pacific Journal of Education*, 29(2), 125-142. <https://doi.org/10.1080/02188790902857149>
- Takayama, K. (2014). Global “diffusion,” banal nationalism, and the politics of policy legitimation. In P. Alasuutari & A. Qadir (Eds.), *National policy-making: Domestication of global trends* (pp. 129-146). Abingdon, England: Routledge.
- Yumino, K. (2005). *Sekai no souzousei kyouiku* [Creativity education in the world]. Kyoto, Japan: Nakanishiya Shuppan.