Declining research capabilities (The Japan Times Jun 29, 2015)

The government's 2015 white paper on science and technology underlines the importance of scientific research as a means to create innovation in society and the economy. However, the weakening research capabilities of both Japanese universities and businesses are eroding the nation's ability to create new industries.

This is a rather pathetic situation given that the government spent more than ¥80 trillion to promote scientific research over the 20 years since the Science and Technology Basic Law was enacted in 1995. The government should waste no time in reviewing its policy to make it more effective.

The white paper boasts that government efforts have increased the total number of researchers by about 160,000 from some 680,000 two decades ago. But although the number of both graduate school students and doctorate holders has risen, the availability of stable jobs for researchers has drastically fallen as government grants to national universities and research institutes have been sharply reduced.

According to a report by the Japan Association of National Universities' Research Institute for Higher Education Policy, the international competitiveness of Japanese scientific research has been declining both in quantity and quality since the early 2000s, as measured in the number of papers written by Japanese scientists as well as in the number of most quoted research papers. The nation lags far behind other advanced industrialized countries in the number of scientific papers in per-population or per-GDP terms, and emerging economies are quickly catching up, the report said.

In the past, researchers at national universities enjoyed stable financial support via government grants distributed by their institutions as well as by funding that they got from outside sources on a competitive basis. But these days the funds they get from the universities have been reduced to a mere pittance due to cuts in government grants, and they rely on competitive funds to carry out research. When researchers are forced to make greater efforts to obtain funding, the time and energy they can spend on research declines. Such a situation also exerts pressure on researchers to produce quick results, which prevents them from tackling major research themes. All of these factors are taking a toll on the nation's overall research capabilities.

What is ominous is that research capabilities of major Japanese companies have also been declining since the late 1990s, according to a study led by Kyoto University professor Eiichi Yamaguchi. The "selection and concentration" approach taken by many firms following the burst of the economic bubble in the early 1990s — which saw firms concentrate their resources on their core competence areas — resulted in cutbacks on research, particularly among electronics and pharmaceutical firms.

The series of Nobel prizes won by Japanese scientists since the turn of the century was the product of the nation's past research environment, when scientists at universities were able to spend far more time and energy pursuing their research and businesses could afford to allow their researchers to engage in time-consuming basic research. Now the research environment is far different at both universities and businesses.

The government has offered measures to support the launch of venture firms that commercialize the results of university research as well as technological innovations at small and medium-size companies. However, the launch of new venture businesses in Japan has sharply declined over the past decade.

The deterioration of the research environment could discourage more Japanese youths from accepting research jobs, possibly leading to a serious shortage of researchers in the future. To avoid a crisis, the government must do at least two things: increase grants to universities so that researchers do not have to waste their time and energy trying to obtain competitive funds, and support doctorate holders whose research shows commercial promise by providing them with sufficient funding. Lawmakers should not let bureaucrats monopolize discussions over the nation's science and technology policy. Instead, they should actively take part in the review of the government policy to promote scientific research.

Abe's ill-conceived university policy The Japan Times Jun 30, 2015

Last month Education minister Hakubun Shimomura issued a notice to all 86 national universities instructing them to make a draft for reforms over a six-year period beginning in fiscal 2016. It specifically asked them to scrap departments and courses devoted to humanities and social sciences, or shift resources more to areas "for which society has strong needs." This reflects an idea contained in the latest version of Prime Minister Shinzo Abe's economic growth strategy, which says that an important role of national universities is "to build a system to produce human resources that match the needs of society by accurately grasping changes in industrial structure and employment needs."

The education minister's move, which reflects his failure to understand the important role played by humanities and social sciences, will weaken the power of intellect not only of those universities but also the nation as a whole. The education minister should change his basic thinking.

In his keynote speech to the council meeting of the Organization for Economic Cooperation and Development in May 2014, Abe said, "Rather than deepening academic research that is highly theoretical, we will conduct more practical vocational education that better anticipates the needs of society." The education minister's notice follows this idea. He seems to have forgotten that one of the important missions of universities is to enrich students' understanding of human culture and nurture their ability to think critically through the study of humanities and social sciences.

Pursuing studies of humanities and social sciences may not produce quick economic results. But shunning them risks producing people who are only interested in the narrow fields of their majors. Studies of literature, history, philosophy and social sciences are indispensable in creating people who can view developments in society and politics with a critical eye. In this sense, Shimomura's move may be interpreted as an attempt by the government to produce people who accept what it does without criticism. Abe, Shimomura and education ministry officials should realize that a decline in the study of humanities and social sciences will likely hamper the growth of creative work even in the fields of technology. They should heed what Steve Jobs said when he launched the iPad2 tablet computer in 2011: "Technology alone is not enough. It's technology married with liberal arts, married with humanities, that yields the results that make our hearts sing."

The education ministry plans to monitor the progress of the national universities in enacting their reforms and allocate government subsidies to them accordingly. In addition, government subsidies to the national universities, which account for about 45 percent of the combined revenue of those institutions, have been reduced by roughly 1 percent annually in recent years. The education ministry's notice will lead some universities, especially those on a weak financial footing, to abolish or scale down humanities and social sciences departments and courses.

Shimomura's notice is the government's latest attempt to intervene in the affairs of national universities. Law revisions in 2014 made it possible for outside members of a national university's management council to select its president and make important decisions, ignoring the will of university instructors. In mid-June, Shimomura asked national universities to display the Hinomaru national flag and sing the Kimigayo national anthem at entrance and graduation ceremonies.

The education ministry should refrain from any moves that suppress the academic freedom and autonomy of national universities. It should remember that the primary purpose of universities is to provide students with a well-rounded education that helps them become more insightful citizens.

Editorials

University autonomy under fire The Japan Times Jun 27, 2015

Education minister Hakubun Shimomura has asked national universities to display the Hinomaru national flag and sing "Kimigayo," the national anthem, at entrance and graduation ceremonies. Although he says he was just making a request and not a demand, it is nothing other than an attempt — coming from an authority having powers over budgets of national universities — to impose the Abe administration's nationalistic inclination on the public universities, which could threaten their autonomy and eventually academic freedom.

Shimomura's request is based on Prime Minister Shinzo Abe's remark on April 9 in the Upper House's Budget Committee. Replying to a question posed by an opposition lawmaker who touched on the issue of displaying the Hinomaru and singing "Kimigayo" during ceremonies held by national universities, Abe said to the effect that because these universities operate on taxpayer money, they should display the flag and sing the anthem at such ceremonies in accordance with the Fundamental Law on Education.

Abe's remark indicates his desire to get the universities to conform to his version of nationalism. It is as if he was saying that because the government grants subsidies to national universities, it can intervene in their operations as it wishes.

His thinking is the opposite of the widely accepted principle that universities should be kept at a distance from state power so they can remain independent in conducting education and academic studies. Abe's viewpoint is a threat to the autonomy of universities and making light of academic freedom guaranteed under Article 23 of the Constitution.

True, Article 2 of the Fundamental Law on Education says that nurturing respect for tradition and culture and love for the nation and one's native land that cultivated them should be a goal of education. But Article 7 of the same law says that the independence, autonomy and other traits of education and academic research at universities must be respected.

Abe and Shimomura should pay heed to this provision in the law.

Their attempt to influence the universities' operations along the government's position could stifle the free atmosphere that such institutions need to have and even distort the basic direction of their academic research, which must be pursued free from nationalistic value and should have universal value that can be appreciated beyond national borders.

Foreign students and scholars might also hesitate to come to Japan to learn and carry out research if the academic environment is charged with nationalism.

It is true that the curriculum guidelines for elementary, junior high and high schools call for displaying the Hinomaru and singing "Kimigayo" at entrance and graduation ceremonies.

But both Abe and Shimomura should remember that during deliberations in a special committee of the Upper House in July 1999 on a bill to legally designate the Hinomaru and "Kimigayo" as the national flag and anthem, education minister Akito Arima declared that such guidelines would not apply to universities and that how to treat the national flag and anthem should be left to individual institutions. Prime Minister Keizo Obuchi also said that in enacting the law the government was not thinking of imposing any duty on citizens concerning the treatment of the Hinomaru and "Kimigayo."

Abe and Shimomura are clearly trying to deviate from the stances expressed by Arima and Obuchi.

They should realize that the basic nature of institutions of higher education is completely different from that of schools of lower and secondary education in that they have the vital role of conducting education and academic research free from state intervention.

Abe and Shimomura do not seem to understand the basic principle that patriotism should be nurtured spontaneously and that criticism of government policies is an expression of love of the nation.

It must be noted that Shimomura's request came just after an education ministry panel decided to allocate larger proportions of government subsidies to national universities that have carried out structural reforms in line with the government policy on higher education. Apart from the panel's decision, the ministry from the beginning has the power to control distribution of subsidies to national universities.

Given this power, Shimomura's request serves as a form of pressure, effectively bordering on a threat, against these universities.

Commenting on Shimomura's request, Takamitsu Sawa, president of Shiga University, said: "Our responsibility to taxpayers is to make contributions through education and research. I think there is no need to comply with the request."

His university displays the national flag during ceremonies but does not sing the national anthem. What he said correctly summarizes the duty of universities and completely makes sense.

In view of constitutionally guaranteed academic freedom and the education ministry's power over the budgets of national universities, the right course of action for Shimomura should be to withdraw his request because it constitutes intervention in the operation of universities.

The Association of National Universities, for its part, should reconfirm the importance of the autonomy of universities and academic freedom, and express clear opposition to the request.