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Chapter 13

Knowledge and Education as Global Public Goods

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Knowledge and education are increasingly important elements in development. They go hand in hand, and while new technologies allow free access to information, education provides people with tools to analyse that information and create new knowledge. However, key international actors need to do a lot of work in this field. In fact, a consistent effort over the next few decades is required for knowledge and education to become de facto global public goods. This chapter assesses some initiatives of the European Union and the G8 to promote knowledge and education as global public goods.

Knowledge and Education as Global Public Goods

The growth of the knowledge economy is a significant characteristic of the changes that have occurred globally in recent decades. Education, invention, and the accumulation of knowledge have always been important to progress. But the main sources of power have traditionally been violence and wealth. However, this balance is changing: as Alvin Toffler (1990) has written, because the nature of power has changed, wealth and violence have become dependent on knowledge.

As a result, knowledge and education have become globalized public goods. In the past the development of an education system was primarily the task of the nation-state, but today universal primary education and gender equality in access to education are set out in the Millennium Development Goals (MDGs). It is an ambiguous situation: knowledge in the broad sense is a driving force for the development of civilization, but it is also a source of growing global inequality. While the developed countries have all the opportunities for the advancement of science, the rest must depend on imported technologies as well as humanitarian and financial assistance.

Knowledge is a non-excludable and non-rival global public good. Everyone can learn a mathematical theorem and this does not prevent others from learning it. The more well-educated people there are in society, the higher the potential of its development. So the source of the problem of global inequality lies not in knowledge as such but in access to it and in the transaction costs associated with gaining access. Primary education is still not universally available: in 2009,

32 million children in sub-Saharan Africa were not in school; 53 percent of the children around the world who are excluded from the school system are girls (United Nations 2011).

MDG 2 is to achieve universal primary education by 2015. Obviously, this is impossible without the participation and assistance of states and international organizations that exercise global governance – first of all, the members of the G8 and the EU, which have the financial and technological capacity for initiatives to reach that goal. Indeed, success depends on the realization of projects such as the One Laptop Per Child Mission to provide children in developing countries with inexpensive computers to improve the quality and efficiency of their education and to overcome the digital divide.¹

Access to primary education is one of the most difficult challenges among those related to education and science, but it is far from the only one. The issue of copyright protection and patenting is still pertinent. The work of researchers should be well paid, although doing so might contradict the principles of non-excludability and non-rivalry that guarantee the existence of knowledge as a global public good. In search of a solution to this problem, a system of state and private support for research and system patenting has emerged. Patenting supports the material incentive of scientists, limiting the non-excludability of knowledge for a certain period.

In this sense, the interaction among key actors in the fields of knowledge and education has a somewhat contradictory character. On the one hand, in recent years such interaction has been determined by growing international cooperation and by the understanding of the necessity of narrowing the global social and economic gap. On the other hand, countries, organizations, and individuals cooperate but also compete with each other. The accumulation of knowledge as a global public good is difficult because of the huge costs of access to high-quality education and the lack of universal educational standards and proper infrastructure.

Education in the G8 Agenda

The problems of education have drawn steadily more attention in recent years. International actors have realized the critical importance of education for the development of modern society. It has become obvious that it is impossible to achieve ambitious political, economic, and social goals without adapting education to today's realities. The G8, which has evolved from being an informal economic club to an important mechanism for global governance, and the intensification of its cooperation and dialogue among international institutions such as the EU, the United Nations, and the World Bank are key to this adaptation.

The number of references to education in the communiqués and documents produced at G8 summits has been rising from year to year (G8 Research Group

¹ See One Laptop Per Child at <laptop.org/en>.

2009). It has frequently been closely associated with other issues such as developing information technologies, fighting unemployment, and providing assistance to the developing countries. Having been included in the G8 agenda since the second half of the 1990s, it received the most attention when Russia made it a theme of the 2006 St Petersburg Summit, but was also a key topic at the 1999 Cologne Summit and the 2002 Kananaskis Summit. The G8 ministers of education met in 2000 and 2006, and the G8 economy ministers also discuss the issue.

The EU has been participating in the G7 and G8 since 1977. It engages in the multilateral forum, promoting its interests and supporting the initiatives of the European countries. Having had a positive experience of cooperation in the field of education, the EU and the European members of the G8 play an important role in defining the G8's approach. At the initiative of European leaders, the topic of 'lifelong learning' became a topic of discussions at the Cologne Summit, where the leaders adopted the 'Cologne Charter: Aims and Ambitions for Lifelong Learning', which emphasized the role of education in achieving economic success, civic responsibility, and social cohesion (G8 1999).

The following year, when Japan assumed the presidency of the G8, it suggested continuing the dialogue on education as one of the issues on the agenda of the 2000 Okinawa Summit. At the first ever G8 education ministerial meeting, in April 2000 in Tokyo, the ministers discussed the challenges facing educational systems in the era of globalization, the use of information and communication technologies in education, and the promotion of lifelong-learning programmes, and international exchanges among students, teachers, researchers, and administrators (G8 Education Ministers 2000).

Also in 2000, UNESCO held the World Education Forum in Dakar, which confirmed the MDGs and adopted new commitments: 'achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults' and 'eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality' (World Education Forum 2000). The strategy was called Education For All and became the main global initiative for education.

G8 members including the EU participate actively in the programme implementation. They addressed it at the 2002 Kananaskis Summit, when they agreed on a document called 'A New Focus on Education for All', in which they supported the joint plan of the World Bank and International Monetary Fund (IMF) to accelerate progress on Education for All and announced their commitment to raise the amount of aid for developing countries (G8 2002). The launch of the Education For All Fast Track Initiative was a result of joint efforts. This programme is implemented by the World Bank but financed from different sources, including the EU budget. In addition, as one of the world's largest donors of official development assistance, the EU implements its own assistance programmes (European Commission 2011a).

Discussions became especially active in 2006, when Russia chaired the G8. The EU was one of the main initiators of ideas and proposals. Jan Figel, the commissioner responsible for education, training, culture, and multilingualism, participated in the G8 education ministers' meeting in Moscow in June 2006. The European perspective was reflected in the declaration that was issued at the meeting, which emphasizes the importance of the internationalization of education, increased international educational mobility, and improved transparency and compatibility among educational systems – all the priorities of the EU, as pointed out by Figel (G8 Education Ministers 2006; European Union 2006). Special attention was paid to the role of education in the adaptation and integration of immigrants, a highly sensitive topic for the EU.

At St Petersburg, the G8 (2006) issued the 'Education for Innovative Societies in the 21st Century', which stresses the important role played by knowledge in the modern societies and defines the key goals of the development of education. These goals are generating new knowledge and innovations, building skills for life and work, overcoming global inequality in access to education, and advancing social cohesion and immigrant integration. The declaration stresses the fact that education is a public good on a global scale, and should be created and provided by states in close cooperation with the private sector through international projects and the harmonization of the educational systems.

A Common European Educational Space as a Global Public Good

The G8's 'Education for Innovative Societies in the 21st Century' mentions the Bologna Process as one of the most successful international educational projects. The Bologna Process is an ambitious initiative to create a common European higher education area. While it is not formally an EU project, its initiation and implementation cannot be analysed outside the context of European integration, which has created the institutional prerequisites for cooperation in education and changed the mind-set of people who have realized the benefits from the regionalization of national public goods.

More than 40 countries participate in the Bologna Process, which aims to harmonize educational systems across a vast region from Reykjavik to Vladivostok. One direct result of reforms should be the 'adoption of a system of easily readable and comparable degrees, also through the implementation of the Diploma Supplement, in order to promote European citizens employability' (European Ministers of Education 1999). The internationalization of education, fostered by the Bologna Process, contributes to cooperation among universities and research centres within Europe and among other countries. A global educational space and infrastructure have gradually emerged, equalizing access to high-quality education. These factors foster the achievement of goals formulated by the G8 education ministers in Tokyo in 2000: doubling the mobility of students and teachers in the 2000s and easing the transfer of

qualifications and credits for students participating in international exchanges (Gorbunova and Larionova 2006).

The EU plays a key role in promoting the European higher education area. Projects such as Erasmus Mundus, the Jean Monnet Programme, and 7th Framework Programme for Research encourage the emergence of a European identity and brings the EU closer to its mid-term aims to build a knowledge-based economy. In the international arena, these education and training initiatives provide Europe with an intellectual and technological superiority and highlight the role of the EU in setting best practices in the creation of global public goods.

The EU pays special attention to the concept of lifelong learning. Understanding its strategic advantages, as stated in the 1999 Cologne Charter and reaffirmed in many other documents by the world leaders, in 2007 the EU implemented a five-year Lifelong Learning Programme (European Commission 2011c). This programme will support the development of the European economy and the knowledge-based society and strengthen social cohesion. It brings together four existing EU projects: Comenius, stimulating mobility and cooperation among secondary schools; Erasmus, promoting international student mobility in higher education; Leonardo da Vinci, supporting the development of professional skills and vocational training; and Grundtvig, focusing on international initiatives in adult education.

The EU also contributes to developing the educational systems of other countries. Since 1990, it has implemented Tempus, a programme that supports institutional reforms in education in neighbouring countries in the Balkans, Northern Africa, Eastern Europe, and the Middle East. The EU promotes cooperation not only with developed countries, but also with the developing ones, thus contributing to the achievement of the MDGs and the Dakar Framework for Action on Education for All. For example, the Edulink programme supports joint projects among European higher educational institutions and the states and regions of African, Caribbean, and Pacific countries.

The Erasmus Mundus programme, one of the largest global projects to promote international cooperation in the education and make high-quality European education accessible to international youth, is a significant global public good. While it is far from being non-excludable, its very existence testifies to the globalization of higher education as a public good. The scale of this programme is growing: it now has an annual budget in excess of €450 million and more than 2.2 million students have participated (European Commission 2010). The target group of the program includes doctoral candidates, and the number of supported post-graduate programmes and the size of scholarships for students, teachers, and researchers are also growing (European Commission 2011b).

The EU has become a global leader in higher education and science as global public goods. And although Europe still lags behind the US in the total number of foreign students and researchers, it has accumulated unique experience in institutionalizing cooperation in all segments of the triangle of knowledge – education, research, and innovation – necessary for the development of modern

societies. The EU thus plays a key role in the internationalization of knowledge as a global public good.

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