

# Chapter 14

## Knowledge and Education as Global Public Goods

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### **Knowledge and Education as Global Public Goods**

The development of knowledge economy is one of the key characteristics of the changes, occurring globally during the last decades. No doubt that education, inventions, and accumulation of knowledge have always been important factors of progress. But the main sources of power were violence and wealth. Nowadays this balance is changing: as pointed out by Alvin Toffler, as a result of metamorphoses of power “both the wealth and violence became vitally dependent on knowledge” (Toffler 1990).

As a result of these changes knowledge and education have become “globalized” public goods, and while in the past the development of education system was primarily the task of the nation-states, nowadays achieving universal primary education and gender equality in access to education is proclaimed as one the Millennium Development Goals<sup>1</sup>. The situation is ambiguous: knowledge in a broad sense is a driving force of the development of civilization – but at the same time it is one of the sources of the growing global inequality. While the developed countries have all the opportunities for the advancement of science, outsiders are dependent on the import of 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 are there in the 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 the provision of access to it, and in the transaction costs associated with gaining access. The problem of the universal primary education is still not resolved: in Africa, more than 40 mil-

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<sup>1</sup> Education for All – quenching the thirst for education, 2007, December, available at: [http://www.bmz.de/en/EU\\_G8/Blickpunkte/blickpunkt\\_efa\\_bonn/index.html](http://www.bmz.de/en/EU_G8/Blickpunkte/blickpunkt_efa_bonn/index.html).

lion children, 60% of whom are girls, are currently excluded from the school system<sup>2</sup>.

According to the United Nations Millennium Declaration, the aim of universal primary education for children everywhere should be reached by 2015<sup>3</sup>. Obviously, it is impossible without the participation and assistance of the states and organizations, claiming to exercise global governance, first of all, the members of the G8 and the EU. Financial and technological initiative belongs to them, and success is dependent on the realization of such ideas as, for example, “one laptop per child”<sup>4</sup>. The concept of this project is to provide children, living in the developing countries, with cheap laptops in order to improve the quality and efficiency of their education and to overcome the “digital divide”.

The problem of access to primary education is one of the most difficult among those related to the sphere of education and science, but it is far from being the only one. In particular, the issue of copyright protection and patenting is quite pertinent these days. The work of researchers should be well-paid but this to some extent contradicts the principles of non-excludability and non-rivalry, which guarantee the existence of knowledge as a global public good. In search of a solution to this problem, the system of state and private support to research and the system of patenting emerged. Patenting supports the material incentive of scientists, while limiting non-excludability of knowledge for a certain period of time.

In this sense, the interaction between key actors in the field of knowledge and education has a somewhat contradictory character. On the one side, in the recent years it has been determined by the growing international cooperation and by the understanding of the necessity of narrowing the global social and economic gap. On the other side, countries, organizations and individuals do not only cooperate but also compete with each other in this critically important sphere. Accumulation of knowledge as a global public good is difficult because of the huge costs of access to high quality education and due to the lack of single educational standards and proper infrastructure.

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<sup>2</sup> Education for Innovative Societies in the 21<sup>st</sup> Century. St. Petersburg, 2006, July 16, available at: <http://en.g8russia.ru/docs/12.html>.

<sup>3</sup> The United Nations Millennium Declaration (in Russian), available at: <http://www.un.org/russian/document/declarat/summitdecl.htm>.

<sup>4</sup> One Laptop per Child. Official website, available at: <http://laptop.org/en/>.

### **Education in the G8 Agenda**

Attention to the problems of education has grown steadily during the last years. Key international actors have realized the critical importance of the sphere of education for the development of modern societies. It has become obvious that achieving ambitious political, economic and social goals is impossible without the adaptation of education to today's realities. An important role was played by the political factors which broadened the agenda of the G8, namely its evolution from an informal economic club to an important link in the mechanism of global governance, and an intensification of dialogue and cooperation with such international institutions as the EU, the UN and the World Bank.

An amount of mentioning of the word "education" in the communiqués and final documents of summits has been rising from year to year and became a stable point of the agenda in the second half of the 1990s (Kirton, Sanderland 2005). Several times the problems of education have been considered in close connection with other issues such as the development of information technologies, fighting unemployment, and assistance to the developing countries. Education was discussed as one of the key topics at the G8 summits held in 1999 in Cologne, 2002 in Kananaskis, and 2006 in St. Petersburg. The meetings of the ministers of education were organized in 2000 and 2006. The ministers of economy discussed the problems of education in 2002.

The representatives of the EC/EU as an international organization participate in the G8 summits since 1977. They participate in the multilateral negotiations, both promoting their interests and supporting the initiatives of the European countries. Having a positive experience of the development of cooperation in the field of education, the EU and European members of the G8 play an important role in defining the approaches of the G8 towards these problems. On the initiative of European leaders, the topic of "lifelong learning" a decade ago became a subject of discussions at the Cologne summit of the G8. The leaders of the states adopted then the Cologne Charter "Aims and Ambitions for Lifelong Learning", in which they emphasized the role of education in achieving economic success, civic responsibility and social cohesion<sup>5</sup>.

Next year the responsibility of hosting the G8 summit rotated to Japan, which suggested continuing the dialogue on education as one of the points on

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<sup>5</sup> G8 Education Ministers' Meeting and Forum. 2000, Tokyo, April 1–4, available at: <http://www.g7.utoronto.ca/education/education0400.html>.

the agenda. The first meeting of the ministers of education was held in April 2000 in Tokyo. They discussed the challenges, which the educational systems face in the era of globalization, the opportunities of using information and communication technologies in education, and the prospects of promoting “lifelong learning” programs and international exchange of students, teachers, researchers and administrators<sup>6</sup>.

In the same year 2000, UNESCO held the World Education Forum in Dakar, which confirmed the goals of the Millennium Declaration and adopted new commitments such as “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”<sup>7</sup>. The strategy was called “Education for All” and became the main global initiative on the development of education.

The member-states of the G8 and the EU participate actively in the realization of this program. It was addressed at the summit in Kananaskis in 2002, when the political leaders agreed a document “A New Focus on Education for All”, in which they supported the joint plan of the World Bank and International Monetary Fund on accelerating the progress towards education for all, and announced their commitment to raise the size of aid to developing countries (Kirton, Sanderland 2005). The launch of the Education for All Fast Track Initiative was a result of joint efforts. This program is implemented by the World Bank but financed from different sources, including the EU budget. Moreover, the European Commission develops its own programs of assistance to the poor countries being the world’s largest donor of official development assistance<sup>8</sup>.

The discussion of the problems of education was especially active in 2006, when Russia chaired the G8. The EU was then one of the main initiators of ideas and proposals. The Commissioner responsible for Education, Training, Culture and Multilingualism Jan Figel was present at the meeting of the ministers of education of the G8 countries held in Moscow in June 2006.

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<sup>6</sup> G8 Education Ministers’ Meeting and Forum. 2000, Tokyo, April 1–4, available at: <http://www.g7.utoronto.ca/education/education0400.html>.

<sup>7</sup> Education for All (in Russian), available at: <http://www.unesco.ru/rus/pages/bythemes/efa.php>.

<sup>8</sup> Development Policies, available at: [http://ec.europa.eu/development/policiesgen\\_en.cfm](http://ec.europa.eu/development/policiesgen_en.cfm).

The “European vision” of the problems and perspectives of the development of education was mirrored in the final document of the meeting, the Moscow Declaration<sup>9</sup>. This document stressed the importance of the internationalization of education, development of international educational mobility, promotion of transparency and compatibility of educational systems – all the priorities of the EU, as pointed out by Jan Figel<sup>10</sup>. A special attention was paid to such highly sensitive topic for the EU as the role of education in adaptation and integration of immigrants.

The final declaration of the G8 members “Education for Innovative Societies in the 21<sup>st</sup> Century” is a policy document which stresses an important role played by knowledge in the modern societies and which defines the key goals of the development of education<sup>11</sup>. These are: generating new knowledge and innovations, building skills for life and work, overcoming of global inequality in an access to education, advancing social cohesion and immigrant integration. The document stresses the fact that education is a public good of a global scale, which should be created and provided by states in close cooperation with the private sector through the launch of international projects and the harmonization of the educational systems.

### **Common European Educational Space as a Global Public Good**

As one of the most successful international educational projects the G8 statement “Education for Innovative Societies in the 21<sup>st</sup> Century” mentions the Bologna Process, an ambitious initiative on creating the common European space of higher education. Formally, the Bologna process is not the project of the EU but actually its initiation and implementation cannot be analyzed outside of the context of European integration, which has created the institutional prerequisites for cooperation in the field of education and changed the mentality of people who realized the benefits from the “regionalization” of national public goods.

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<sup>9</sup> G8 Ministerial Meeting on Education, 2006, Moscow, June 1–2, available at: <http://www.g7.utoronto.ca/education/education2006.html>.

<sup>10</sup> G8 on Education: Commissioner Figel’ to present the EU’s experiences in Moscow, 2006, Brussels, May 31, available at: <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/06/702&format=HTML&aged=0&langu>.

<sup>11</sup> Education for Innovative Societies in the 21 Century.

Nowadays more than forty countries participate in the Bologna process and it is possible to speak about the harmonization of educational systems on the huge space from Reykjavik to Vladivostok. One of the direct results of reforms should be an “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”<sup>12</sup>. Internationalization of education, fostered by the Bologna process, also contributes to the development of cooperation between universities and research centers of the European and other countries. One can observe a gradual emergence of the global educational space and the development of infrastructure, equalizing access to high quality education. All these facts favoring the realization of goals formulated at the G8 ministers of education meeting in Tokyo in 2000: doubling the mobility of students and teachers during the 2000s and easing the transfer of qualifications and credits for students participating in international exchanges (Gorbunova, Larionova 2006).

The EU plays a key role in the promotion of a European higher education area. Realization of such projects as ERASMUS MUNDUS, Jean Monnet, and Framework Program for Research, Technological Development and Demonstration Activities leads to the emergence of the European identity and brings the EU closer to one of its main mid-term aims: building a knowledge-based economy<sup>13</sup>. At the international arena this provides Europe with an intellectual and technological superiority and attributes to the EU the role of the “best practice” in the creation of global public goods.

The EU pays a special attention to the realization of the concept of “lifelong learning.” Understanding its strategic advantages, as stated already in the Cologne Charter “Aims and Ambitions for Lifelong Learning” in 1999 and as reaffirmed in many other documents adopted by the world leaders, the EU started to implement a new long-term Lifelong Learning Programme<sup>14</sup>. Its realization during the period of 2007–2013 should lead to the development of the European economy, the emergence in Europe of the knowledge society, and to strengthening social cohesion. The program was formed by bring-

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<sup>12</sup> The Bologna Joint Declaration of the European Ministers of Education, in: *The Bologna Process and its Implications for Russia*, Moscow: RECEP, 2005, pp. 147–149.

<sup>13</sup> Lisbon Strategy, available at: [http://europa.eu/scadplus/glossary/lisbon\\_strategy\\_en.htm](http://europa.eu/scadplus/glossary/lisbon_strategy_en.htm).

<sup>14</sup> The Lifelong Learning Programme 2007–2013, available at: [http://ec.europa.eu/education/programmes/newprog/index\\_en.html](http://ec.europa.eu/education/programmes/newprog/index_en.html).

ing together four existing EU projects: Comenius, stimulating mobility and cooperation between secondary schools; ERASMUS, promoting international student mobility; Leonardo da Vinci, supporting the development of professional skills; and Grundtvig, focusing on international initiatives in the field of adult education.

The EU also contributes a lot in the development of the educational systems of other countries. Starting from 1990, the EU implements TEMPUS program, which supports the institutional reforms in the sphere of education in the neighbor countries of the EU – in the Balkans, in Northern Africa, Eastern Europe, and in the Middle East. On the international stage the EU promotes cooperation not only with developed countries, but also with the developing ones, thus contributing to the achievement of the Millennium Goals and of the Dakar Framework for Action “Education for All.” For example, the program Edulink supports joint projects of the European educational institutes and the representatives of African, Caribbean, and Pacific countries.

The program ERASMUS MUNDUS is worth special mentioning, being one of the largest projects in the world developing international cooperation in the field of education and making high-quality European education accessible for the international youth. Of course, this “global public good” is far away from being non-excludable. Still, the very fact of its existence testifies to the “globalization” of higher education as a public good, and the scale of this and other such programs is growing. The new phase of the implementation of ERASMUS MUNDUS program starts in 2009: its total budget for the period until 2013 is around EUR 500 mn. The target group of the program includes now Ph. D. candidates; and the number of supported masters programs and the size of scholarships for students, teachers, and researchers is also growing.

Nowadays the EU has become a global leader in the sphere of development of higher education and science as global public goods. And although Europe is still lagging behind the US in the total number of foreign students and researchers, its has accumulated unique experience in the institutionalization of cooperation in all segments of the “triangle of knowledge” (education, research, innovation) crucial 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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