

Figure 9.2
Educational Levels Achieved by Working-Age Population
(in percent)

	25-29	30-44	45-59	60-64	65+
Completed Higher Education	7.9	10.3	8.3	5.0	2.8
Completed Secondary	37.7	32.5	21.3	14.4	10.9
Basic Vocational	40.0	32.0	14.9	7.6	5.0
Primary	13.9	24.5	49.7	59.2	55.1
Incomplete Primary	0.5	0.7	5.8	13.8	26.2

Source: Rocznik Statystyczny, 1991.

Science and Technology: Polish scientific and technological development is focused in three types of institutions. Basic research is conducted by the Polish Academy of Sciences, a national institution with specialized divisions addressing each of the scientific disciplines. The Academy employs more than 10,000 people, some 40% of whom are researchers or scientists, and 30% of whom are engineers. Applied research is performed by more than 150,000 persons working at institutes, laboratories, and development centres attached to various industrial sectors. Both basic and applied research are also conducted in Poland's universities and polytechnics by many of their 46,000 faculty members.

Poland's scientific and technical efforts tend to be concentrated in the manufacturing sector. Of the 162,000 scientific and technical personnel active in industry in 1987, almost two-thirds worked in the manufacturing sector. Coordination of Poland's scientific and technical development is performed by the Office for Scientific Technical Progress and Implementation which is headed by a minister of the government.

New Trends in Education: The opening to the West and the related drive to marketize the economy, has fostered several significant new developments in the Polish education system. One is a strong interest in foreign (especially western) languages. In 1991, 55 different language departments were active in Polish universities. Where once Russian was compulsory, now the most popular foreign language is English.

At the same time, new types of learning are being sought after. Several western countries including Canada, have provided funding for training in western-style business management. Poland's first business school has been established in Warsaw, and a National School for Public Administration has also been launched.

A renewed interest and commitment to education has appeared in Poland. The number of general high-schools grew from 931 in 1989 to 1091 in 1991. A dramatic increase has also been realized in the number of students attending these schools, from 131,100 (22.8% of elementary school graduates) in 1990 to 152,000 (25.4% of elementary school graduates) in 1991. The significance of these statistics lies in the fact that fewer students are leaving school and more are opting for the kind of general high school that can lead to post-secondary education. Vocational schools have also experienced an increase in enrollments.

A growing movement is afoot to reform the academic curriculum, introduce new teaching methods, decentralize educational administration, and encourage private institutions to offer schooling. In 1991, there were already 190 private elementary schools and 173 private high-schools serving a total of 26,000 students. There are also numerous private institutions offering courses for adults in foreign languages, accounting, and management.

Medical Care

Since the Second World War, every citizen of Poland has had the right to free medical care and free or subsidized prescription drugs. In practice, however, the quality of medical care has been uneven and in the late 1970s, the country's health care system entered a period of crisis from which it has not yet recovered. Despite steady growth in the numbers of medical facilities and personnel, the quality of medical care has remained below western standards. Hospitals are poorly equipped, many medicines are unavailable, and the overwhelming demand for medical services often renders them inaccessible, though they are nominally free. It is common for patients to offer gifts and even "tips" to medical personnel as a means of securing care that would otherwise be unavailable.

According to the government's own assessment, standard indicators such as the number of doctors or hospital beds place Poland in the mid range of developed countries (see Figure 9.3) Specialized indicators such as the use of ambulances or sanatoria are comparable to the richest developed countries. In terms of overall spending on health care, however, Poland ranks among the poorer industrialized nations. In 1991, the state budget for health care reached 41.7 trillion *zlotys* or 1.2 million *zlotys* per person (equivalent to \$US 110 at the current rate of exchange). This compares with average health care expenditures of \$US 700-1200 in the