Evaluation of the World Bank's Assistance to Basic Education in Romania

A Country Case Study

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This paper is available upon request from IEG.

2007
The World Bank
Washington, D.C.

ENHANCING DEVELOPMENT EFFECTIVENESS THROUGH EXCELLENCE AND INDEPENDENCE IN EVALUATION

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ISBN-13: 978-1-60244-079-1
ISBN-10: 1-60244-079-4

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ACRONYMS AND TRANSLATIONS

Capacitate	8th grade selection examination
CEDU2000+	Center Education 2000+ (Open Society Foundation)
CEEC	Central Eastern European Countries
DFI	Direct Foreign Investment
DfiD	(U.K.) Department of
EBRD	European Bank for Reconstruction and Development
EBI	European Bank of Investment
EC	European Commission
ECA	Europe and Central Asia
EDP	Editura Didactica si Pedagogica, State publishing house
ERP	Education Reform Project
EU	European Union
GDP	Gross National Product
GoR	Government of Romania
ICR	Implementation Completion Report
IES	Institute for Educational Sciences
IEG	Independent Evaluation Group (World Bank)
Judet	County-level government
MER	Ministry of Education and Research
NAEB	National Assessment and Examinations Board
NAES	National Assessment and Examinations Service
OECD	Organization for Economic Cooperation and Development
PAL	Programmatic Adjustment Loan
PIRLS	Progress in Reading Literacy Study
PISA	Program for International Student Assessment
QAG	Quality Assurance Group
REP	Rural Education Project
SOE	State-owned Enterprise
SRP	School Rehabilitation Project
TAB	Textbook Approvals Board
TIMSS	Trends in International Mathematics and Science Study

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Preface

From 1990, the year of the World Conference on Education for All (EFA), through mid-2005, the World Bank committed approximately $12.5 billion in support of the expansion and improvement of primary education in developing countries. By the early years of the current century support to primary education was nearly half of the Bank's lending portfolio in education. Sector studies and Bank strategies have emphasized the critical role of primary education --especially the basic knowledge and skills it provides. Expansion and improvement of primary education are often at the center of a country's poverty reduction efforts.

In 2006, the Independent Evaluation Group issued *From Schooling Access to Learning Outcomes: An Unfinished Agenda,* which assessed the development effectiveness of World Bank assistance to improve countries' knowledge and skills base through the provision of quality primary education to all children, especially since 1990. The evaluation drew on many sources of information, including desk reviews of the portfolio of primary education lending and analytic work, in-depth project evaluations and country case studies.

The country case studies assessed the overall cumulative support of the Bank (lending and non-lending) to primary education in the context of historical and concurrent factors that impinged upon and shaped them. In particular, they addressed three questions: (a) What changes have taken place in primary education service delivery and outcomes since 1990? (b) To what extent have Bank efforts (though lending and non-lending channels) contributed to those changes? and (c) To what extent would the changes have taken place in the absence of Bank support?

The four case study countries – Mali, Pakistan, Peru, and Romania -- were selected based on their performance (strong or weak) in improving learning outcomes and their per capita income, from among those countries that had received at least US$100 million in support from the World Bank for primary education. Each case study was undertaken by a team of 4 members, 2 educator-researchers from outside the country and 2 from within. The studies were reviewed both by the headquarters evaluation team and by World Bank project and sector managers for the country.

The Romania case study was based on a two-week mission in March of 2005 as well as a review of dozens of World Bank and Romanian documents. The evaluation team was comprised of Sue Berryman, Amber Gove, Dana Sapatouro and Anca Tirca. The team gratefully acknowledges the generous time and thoughtful responses of interviewees, especially of parents, students, teachers and school principals. Government officials, donors, NGO representatives, and business leaders were also very giving of their time, providing insight into the dramatic changes in Romanian education and the role of World Bank investment in the transition since 1990. A complete list of interviewees can be found in Annex I. Given the limited time available, the team's field visits were restricted to the area around the capital of Bucharest and the outskirts of Sibiu, a city located on the central plains of the Transylvanian basin.

In addition to the more than twenty interviews with key education and finance sector actors, the team observed classrooms and conducted interview at 8 schools in Bucharest and Sibiu districts. Students, teachers, principals and parents were interviewed in each school regarding the factors that contributed to student learning, expectations for student success and system and schooling conditions. In several schools the evaluation team reviewed student workbooks and classroom lessons and asked children to read aloud from their textbooks. While this was clearly not a full scale or representative assessment, this exercise provided the team with a clearer understanding of student learning than would have been possible simply through interviews and secondary data analysis. The team is especially grateful to the teachers, students and parents for their cooperation and willingness to discuss their hopes and dreams for the education of Romania's youth.

The team also gratefully acknowledges the support of the World Bank Resident Mission staff in Bucharest and especially Ana Maria Sandi, Lead Education Specialist, who facilitated our work, provided logistical support and offered insight into the landscape of Romanian education, economics and politics.

EXECUTIVE SUMMARY

CONTEXT

Over the last 15 years, two huge events have impacted all dimensions of Romania's economic, political, and social life: the 1989 collapse of communism and of Romania's autarkic regime and Romania's drive to join the European Union.

Economic trends. In the 1990s the Government of Romania's (GoR's) commitment to reform, especially to economic reforms such as privatizing the large number of state-owned enterprises, was vacillating and ineffectual. By the end of the 1990s, real GDP was 83 percent of its level in 1990; the total poverty rate had peaked at about 36 percent and the extreme poverty rate, at 14 percent. In response to a greater commitment to economic reform, GDP finally regained and exceeded its 1990 level in 2001. By 2004 per capita income was estimated to have returned to its 1989-1990 level; poverty and extreme poverty had declined; inflation had declined dramatically; the banking sector was on firmer ground; and privatization of SOEs had accelerated.

Poverty trends. Even by 2002 three out of every 10 Romanians were poor; one out of ten, extremely poor. At the same time, there is a strong positive association between economic growth and poverty reduction. Several variables predict poverty, but multivariate regressions show that the key correlate of poverty is education, with Roma ethnicity and being unemployed second and third in importance, respectively. Rural residents have more than double the probability of being poor than urban residents and rural areas account for 67 percent of total poverty. However, controlling for types of primary income earners in the household virtually eliminates the poverty gap between rural and urban households, indicating that rural areas have a greater concentration of households with lower economic potential.

Employment. The dynamics and configuration of employment affect families' demand for education. Since the transition Romania has seen the emergence of three perverse labor market trends: 1) migration of active workers into subsistence agriculture and other low productivity/low earnings activities; 2) declining participation in the labor force in the form of retirements, early retirements, and discouraged workers; and 3) flows out of employment and into long term unemployment. Romania started the transition with the largest share of employment in low-skill agriculture among the Central Eastern European Countries, and its employment structure deteriorated in 2001 compared to the distortions observed in 1989. De facto, the lack of labor reallocation opportunities in the non-agricultural sectors has turned agriculture into the labor employer of last resort. Natural resources and unskilled labor also dominate (76 percent) the input composition of exports.

Romania's employment structure and the factor intensity of its exports suggests that during the review period Romania straddled two stages of economic growth—factor-driven and investment-driven—and was in a low-skills, low-wage equilibrium. These realities imply a dampening effect on family demand for education and on Government's motivations to reform education. Moving further into investment-driven growth and innovation-driven growth will accelerate business demand for skills and family demand for education.

Demographic trends. Between 1990 and 2035 the number of basic school age children is projected to decline from 3.3 million to 1.8 million—a 45 percent decline. However, most of this decline will have occurred by 2005, with the population of basic education age in 2005 being 37 percent less than that in 1990. Although the basic school age population is projected to continue trending down until 2030, the downward trend is much more gradual between 2005 and 2030 than between 1990 and 2005.

EU accession process. Romania applied for EU membership in June, 1995, and entry into the EU is scheduled for January 1, 2007. Government policies and actions are driven by the EU accession process, specifically by the EU's *Acquis Communautaire* that is designed to bring new entrants' practices in line with those of EU countries. The *Acquis* does not provide a coherent strategy for social policy issues, including health, education, and poverty reduction. It leaves these issues mostly to the individual countries. The run-up to accession has consequently "crowded out" Government's attention to a number of areas outside the *Acquis* that are critical for Romania's sustainable development, including education. EU accession poses a significant unfinished education agenda for Romania, as evidenced by the fact that its 15 year olds performed poorly on an OECD learning assessment particularly relevant to EU accession. About 70 percent scored below the level that seems required in order to function in a modern workplace, in contrast to 37 percent of EU 15 year olds.

NATIONAL GOALS FOR BASIC EDUCATION

Romania was among the first Central and Eastern European countries to initiate a comprehensive, large-scale education reform. Reform goals included introducing a flexible national curriculum, alternative textbooks, a private textbook publishing industry, the teacher training required to change classroom practice, the training of head teachers and school inspectors in how to institute quality-focused management of the schools, a national assessment and examination service, rationalized management of the school infrastructure, and reducing the quality gap between rural and urban schools. Commitment to various parts of the reform agenda varied with the political party in power and specific minister of education. The period of 1990-1995 was a clarifying phase, with reforms gathering force in the 1995-1999 period. The 2000-2003 period saw some reversals in the reform agenda, and advances in others.

WORLD BANK SUPPORT FOR EXPANDING AND IMPROVING BASIC EDUCATION

The World Bank started helping Romania reform basic education from early in the transition. The Bank's 1991 sector work showed that that the sector needed a comprehensive approach to reform, with key priorities in the areas of pedagogy and curriculum. This analysis led to a tightly connected set of projects: the Education Reform Project (ERP), approved in 1994; the School Rehabilitation Project (SRP), approved in 1997; a pilot focused on rural schools, funded by reallocating ERP funds; and a Rural Education Project (REP), approved in 2003.

SUMMARY OF RECENT CHANGES IN BASIC EDUCATION IN ROMANIA

Several key players have been involved in Romania's basic education reform efforts during the review period: Ministry of Education and Research (MER), Ministry of Finance (MoF), Parliament, semi-autonomous agencies and NGOs, local governments, school staff, parents, and students. They differed in their commitment to the reform agenda and in the "rules of the game" (formal and informal), the organizational infrastructure, and the skills and knowledge that they built to sustain and deepen it. For example, the semi-autonomous agencies and NGOs provided the steadiest commitment to the reform and constituted its early technical leadership. Over the review period they built a cadre of professionals competent in curriculum design, educational measurement, teacher development, textbook quality, educational management, and rural education. However, the MER still reveals a tension between the old concepts of command and control and those of providing policy frameworks and oversight. Accordingly, it still lacks capacities prerequisite for it to function effectively in its evolving role in a decentralized education system: generating data on sector performance, conducting policy analysis, undertaking evaluations, and engaging in strategic planning, all of which are crucial to effective *policy making*. Also, it still lacks a strong financial management capacity that can give the MER an advantageous seat at the table in MoF budget negotiations; and a modern human resource management system.

BASIC EDUCATION OUTPUTS, OUTCOMES, AND THEIR IMPLICATIONS FOR HOUSEHOLD DEMAND

Enrollment and graduation rates for basic education. Romania started the transition with respectable gross enrollment rates for basic education and has managed to increase them steadily across the review period to about 100 percent. Total net rates are very close to gross rates; graduation rates from 8th grade are solid at about 96 percent, but remained relatively flat from 1994/5 to 2003/4.

Enrollment rates vary by individual and household characteristics. Gender has no effect, and moving from the second through the top consumption decile has only a modest effect. Rural residence depresses enrollment rates, but the effect is not large, whereas other variables have significant negative effects: being Roma, being handicapped, being extremely poor or in a household in the lowest consumption decile, having no parent that has attained more than primary education, or coming from a household with a large number of adults or children 0-14 years of age.

Repetition and dropout rates for basic education. Consistent with the region, Romania's repetition rates for basic education are low, stabilizing at around 3.5 percent. From 1990/91-2003/04 drop-out rates, defined as the ratio between the difference in the number of students enrolled at the beginning and at the end of the school year, remained at or below 1.5 percent.

Learning outcomes. The 8th grade (*capacitate*) and 12th grade (*baccalaureate*) exams, structured to measure the achievement of the curriculum's learning standards by subject and grade, have respectable and relatively stable pass rates: each year about 90 percent pass the *capacitate;* about 96 percent, *the baccalaureate.*

The international assessments (TIMSS and PISA) show a more negative picture. Romania's 8th graders participated in the TIMSS in 1995 (before the reform), 1999 (the reform was being vigorously implemented), and 2003 (conclusion of the 2000-03 period when there was some backing away from the reform agenda). Romania's TIMSS results are virtually flat across the eight years, and Romanian students performed less well in mathematics and science for each of the three rounds than the average for all participating ECA countries.

It is not clear what the TIMSS series tells us about the reform. Romania's reform could not have affect learning outcomes in schools before the implementation of curriculum reforms the 1998/99 school year. Thus, there was no reason to have expected an effect for the first two rounds of TIMSS. "No effect" can also signal an unevenly or poorly implemented reform. From 2000-03 there was government ambivalence about some aspects of the curriculum reform, which in turn created confusion at the level of the school which could have clouded the impact of the reform on learning. The problems with in-service training of teachers undercut the planned link between the new curriculum and teachers' actual classroom practices. Finally, international evidence shows that student performance often drops in the first years of a major reform simply because any big reform is inevitably "messy" as teachers and students struggle to grasp its implications.

PISA is especially relevant to Romania's aspirations to join the EU because it measures skills valued in innovation-based economies. ECA countries generally did not perform well on PISA, but Romania tested below the ECA average and well below the EU average. Particularly disturbing is that about 70 percent of Romania's 15 year olds performed below level 3—i.e., at levels 0, 1, or 2. Scoring at level 3 or higher is generally considered a prerequisite for functioning well in a modern workplace. EU students had double Romania's chance of performing at levels 3-5 (63 percent). Romania has a substantial amount of work to do if its schools are to create the human capital that Romania needs to compete economically in the EU and its citizens need to avail themselves of higher wage job opportunities in the Union.

Labor market outcomes. In 2004 the unemployment rates for primary education graduates are relatively low, which may be correlated with the low unemployment rates in rural areas. The most vulnerable to unemployment are those in the middle of the educational attainment distribution, i.e., individuals with lower-secondary, some high school or high school, and vocational (secondary or post-secondary education). However, multiple regression estimates do not yield much evidence that schooling is systematically correlated with the likelihood of unemployment, regardless of age.

The returns to an additional year of schooling across the period 1960-2000 are fairly flat between 1966 and 1989, but they more than doubled between 1989 and 2000. The data are not consistent with standard explanations of this upward trend, such as constrained supply of better educated workers, product shifts, or skill-biased technical change. Under communism wages were compressed—i.e., wages did not reflect variations in human capital. It is possible that the trend since 1990 simply signals the predictable decompression of wages that occurs with the introduction of prices.

Household demand for education. Household demand for basic education is generally high, as evidenced by enrollment rates, graduation rates, dropout rates, and learning performances on

the 8th grade examination (*capacitate*). Demand is variable, and is more focused on access than on quality. Being Roma has an independent and highly negative effect on demand, especially in urban areas. Although rural areas have lower enrollment rates than urban areas, it is characteristics of households more prevalent in rural areas, not rural residence itself, which depresses demand.

WORLD BANK'S CONTRIBUTION TO SECTORAL CHANGES (1990-2004)

The Bank's education lending has been coherent and highly relevant. The relevance of the Bank's work in other sectors that affect education is another story. Every CAS since 1993 has supported education, but the education sector has needed inter-sectoral attention that so far has failed to materialize—e.g., public administration, public expenditure and financial management, decentralization, labor markets, and rural development.

Relative to the projects' objectives, the Bank's education assistance performed well except for teacher training, a problem that reflected more on the Borrower than the Bank. Despite efforts in 2000-03 to reverse the reform, it has had measurable impact on concepts, incentives, and capacities. The implementation completion reports (ICRs) assign solid ratings for outcomes, institutional development, and Bank performance; IEG ratings are consistent with or higher than those assigned by the ICRs. At the same time, the Bank significantly under-estimated the magnitude of conceptual changes ("habits of thought") that ECA countries had to undergo if they were to establish market economies and democracies. The design of the ERP unfortunately did not include a sustained public relations campaign around its objectives, which might have made them more palatable to a wide range of stakeholders. The concepts behind the reform agenda were largely alien to players conditioned to a highly centralized, command and control system.

Interviews with Romanian counterparts left no doubt that Romania's basic education would not have made the progress achieved in the last 15 years without the consistent support of the World Bank. One particular interview revealed the basis for these shared views. "It was not just the money that was important. If we learned anything, we learned it from the World Bank teams. These teams helped the country understand the concepts behind the project and helped us design and implement the project. This is a major difference between the Bank and other donors. Other donors usually send consultants who do their work and then leave. The World Bank, on the other hand,… builds groups of Romanian specialists that can contribute to activities other than World Bank activities. Romania will need the Bank's support even after Romania joins the EU. You can't find the World Bank's expertise in the EU. World Bank staff is highly committed and fine specialists….There are only good lessons from the Bank."

Romania's drive to join the EU raises the question of whether the Bank will continue to have a role in education in Romania. The Quality Assurance Group (QAG) Country Lending Enhancement Review (World Bank 2004b) concluded that "After accession the social sectors—broadly defined—may be the most important niche for Bank involvement, as the substantial EU resources will be focused on other sectors."

LESSONS LEARNED FROM BANK ASSISTANCE TO BASIC EDUCATION

Of the lessons learned, these seven are the most important.

- Firmness and flexibility need to be balanced in project negotiations
- Complexity can advance implementation if the design is coherent
- The Bank may have a role in sustaining project achievements
- Creating new partners among NGOs and semi-autonomous agencies builds capacity that tends to be sustained
- GoR will need to exert more donor coordination, especially for Roma projects
- Building support for reform is especially needed for projects with long time frames or that are implemented under decentralization
- The meso-level is key to successful education reform.

CONCLUSIONS

Although the Bank's education team has had a significant and positive effect on Romania's basic education system across the 15 years reviewed, the overall Bank gets a lower grade. Heretofore, the Bank's management has not solved the admittedly difficult "silo" problem that undermines the cross-sectoral collaboration needed in order to rationalize reforms of Romania's education system.

The failure to include the sector in any completed or planned (as of mid-2005) public expenditure reviews is difficult to explain (there are signs that this is changing). The MER is struggling ineffectually with the sector's fiscal issues, and neither the GoR nor the Bank has grounds for evaluating inter-sectoral allocations as they affect the education sector. The sector needs help with its fiscal framework for decentralization, but decisions here have to be aligned with a larger decision framework. The lack of a country team/GoR agreement on a rural strategy undercuts efforts to support rural education and the Roma that live in rural areas. The work on EU integration has done little to pursue the human capital demands of Romania's integration into the Union—e.g., rural-urban gaps in educational achievements or the implications of the PISA results.

The cross-sectoral problem is not unique to the education sector or to Romania. IEG and QAG have conducted a number of country performance assessments that reveal that the Bank's cross-sectoral cooperation is not being pursued effectively. The concept of the country team was expected to create cross-sectoral collaboration around agreed-upon problems that the country needed to solve. In the event, it has proved very difficult to make this concept work well.

There is agreement that even after Romania joins the EU, the World Bank has a role in education. Romania has skill level problems to solve to enable its entry into the Union. It cannot afford to focus solely on the *Acquis*, ignoring factors outside of the *Acquis* that directly affect its chances of solving problems within the *Acquis*. Education is one of those factors. If the Bank's management for Romania chooses to fill the vacuum created by the *Acquis,* the Bank has problems of inter-sectoral collaboration to solve if it is to help the country address challenges in the education sector effectively.

1. INTRODUCTION AND ANALYTIC FRAMEWORK

OBJECTIVES

The World Bank's Independent Evaluation Group (IEG) is evaluating the cross-national effectiveness of the Bank's assistance to countries in improving primary school access, equity, and educational outcomes, especially since the beginning of the Education for All (EFA) movement in 1990. The objective is to influence the design and effectiveness of current and future Bank policies and programs. The cross-national study will be based in part on several in-depth country case studies, of which this is one.[1] The country case studies cover all modalities of Bank influence at the country level: policy dialogue; analytical work; technical assistance and capacity building; investment lending; and conditionality in adjustment lending. The effectiveness of Bank assistance is being assessed relative to the counterfactual. What might have happened in the absence of Bank support?

The IEG cross-national analysis and most country case studies target primary education (usually grades 1-6). However, the Romania case study focuses on *basic* education (grades 1-8). In Romania access and equity at the primary level are not significant issues, and Government, donor, and Bank policy and financing initiatives have accordingly been cast more broadly to cover both primary and lower secondary. The period under review is 1990-2005, 1990 being when the World Bank first began working in Romania.

ANALYTIC FRAMEWORK AND DATA COLLECTION METHODOLOGY

IEG's terms of reference for the country case studies includes a flow chart of expected channels of Bank influence on country-specific educational outcomes. The basic approach consists of:

- tracking changes in the outcomes of the education system between the start of the transition (1990) and now;
- identifying contextual factors impinging on the sector's trajectory, such as macro-economic, demographic, employment, or poverty trends as these affect variables such as public financing of the sector or household demand for education, and Government, Bank, and donor interventions; and
- checking potential influence paths for evidence that the Bank's activities have contributed to changes in the sector's outcomes, and, if so, how.

The theoretical basis for evaluating the effects of an intervention on something—in this case, the effects of the Bank's interventions on Romania's basic education—is the experimental paradigm. In fact, Bank activities almost never approach the standards for a true experimental design. And in the case of this case study, the effects of a 15 year stream of multiple interventions are being evaluated. Thus, "experimental paradigm" is more metaphor and logical guide than actual framework. In this sense it alerts us to several issues: a focus on outcomes, the

[1] Mali (SSA), Pakistan (SA), Peru (LAC), and Romania (ECA) represent the set of country case studies.

attribution or "contamination" problem that stems from multiple interventions with different time frames, and the question of unintended consequences (positive and negative).[2] Ultimately, triangulating among multiple sources of information and judgment has to be the grounds for assessing the Bank's contribution to changes in the outcomes of Romania's basic education.

The data collection methodology for the study is described in Annex E.

ORGANIZATION OF THE PAPER

Sections 2 and 3 assess the larger context as it affects basic education and the nature and extent of Government, Bank, and donor interventions intended to produce change. Section 4 assesses the effects of these interventions on basic education outputs and outcomes and household demand for education.

Section 5 judges the contribution of Bank activities to observed changes—the relevance and efficacy of Bank assistance, the efficiency and sustainability of changes supported by the Bank, and the necessity of Bank support in order to produce change—in other words, the counterfactual. Would changes have occurred in the absence of Bank support?

Section 6 discusses the lessons learned from the Bank's assistance to Romania as it affected basic education. Section 7 draws conclusions about past development effectiveness of Bank support in Romania, and the implications of that history for improving the effectiveness of future Bank assistance.

2. BASIC EDUCATION IN THE NATIONAL CONTEXT

TRANSITION FROM COMMUNISM TO EU ACCESSION

Over the last 15 years, two huge events have impacted all dimensions of Romania's economic, political, and social life: the 1989 collapse of communism and of Romania's autarkic regime and Romania's drive to join the European Union, energized by the EU Council of Ministers' decision in December 1999 to open EU accession negotiations with Romania. Romania started the review period with an exhausted populace and severe economic, political, and bureaucratic distortions. This section discusses the economic, poverty, employment, and demographic trends of the review period.

Economic Trends

Romania's economic realities and government's management of those realities affect the public resources potentially available to the education sector and the transparency, coherence, and accountability for government budget formation and execution processes.

[2] Unintended consequences depend on the stream of opportunities that the intervention sets up. Actors that are not the intended beneficiaries of the intervention take advantage of opportunities set in motion by the intervention to achieve objectives that were not originally intended.

In the 1990s the commitment to reform, especially economic reforms such as privatizing the large number of state-owned enterprises (SOEs), was vacillating and ineffectual, characterized by "false starts, policy reversals, and half-hearted reforms" (World Bank 2005). The state exhibited a pervasive lack of fiscal discipline, subsidizing unprofitable SOEs through the state-owned banking system and accumulating arrears. Private sector development was hampered by continuing macro-economic instability, the slow pace of privatization, an unreformed financial sector, and legal and regulatory barriers to the growth of new firms (World Bank 2005).

Romania experienced two major economic crises during the decade: one in 1991-93 and another in 1997-98 (World Bank 2004a). As Table 2.1 shows, in the 1991-93 crisis, the annual inflation rate reached 256 percent in 1993 and real growth in GDP fell almost to minus 9 percent in 1992. In the crisis of 1997-99, inflation increased from 39 percent in 1996 to 155 percent in 1997, real growth in GDP returned to negative figures (minus 5 to 6 percent), and the poverty jumped to more the 30 percent. By the end of the 1990s, real GDP was just 83 percent of its level in 1990. And by 2000 the total poverty rate had peaked at about 36 percent; the extreme poverty rate, at 14 percent.

Reforms started in 1999-2000 began to show results in the following years of the new decade. Starting in 2001 GDP growth returned to and then began exceeding the 1990 level; by 2004 per capita income was estimated to have returned to its 1989-1990 level. As seen in Table 2.1, poverty and extreme poverty abated by 2002 and inflation dropped dramatically (and was projected to drop still further to 12 percent per annum in 2004). Institutional reforms also began to bear fruit: the banking sector now stood on firmer ground, with many state-owned banks having been privatized, and the privatization of state-owned enterprises (SOEs) was accelerating (although as of 2002 just 57 percent of the SOEs in existence in 1993 had been privatized). (See Table 6, World Bank, 2004a).

Despite this progress, the Composite Index of the European Bank for Reconstruction and Development (EBRD) reveals the distance that Romania has yet to travel. On all but one dimension Romania is ranked 11th out of the 11 Central East European Countries (CEEC)[3]. For example, in terms of cumulative direct foreign investment (DFI) per capita between 1989 and 2003, the figure for Romania was about a quarter of that among the CEEC on average. In terms of estimated inflation for 2004, Romania was running an inflation rate that was about double the CEEC average (Table 1.1, World Bank 2005). There is still a worrisome level of fiscal vulnerability, due to energy arrears, continuing subsidies to both state and private firms, a looming crisis in the pension system, a large informal economy, and possible liabilities of some large and questionable public investment programs.

[3] The CEEC consist of Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

Table 2.1. Selected Economic Indicators for Romania, 1992-2003

Indicator	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
GNI per capita (US$)	1240	1190	1270	1470	1590	1520	1520	1580	1680	1710	1850	na
Poverty rate (headcount)	na	na	na	25.4	20.1	30.3	30.8	33.2	35.9	30.6	28.9	na
Extreme poverty rate (headcount)	na	na	na	9.4	6.3	11.2	11.3	12.5	13.8	11.4	10.9	na
Unemployment rate	na	na	na	na	na	8.9	10.4	11.8	10.5	8.6	8.1	7.8
Real GDP growth	-8.8	1.5	3.9	7.1	3.9	-6.1	-4.8	-1.2	2.1	5.7	4.9	4.7
CPI inflation (p.a.)	210.4	256.1	136.7	32.3	38	154.8	59.1	45.8	45.7	34.5	22.5	15.1
Innvestment (% GDP)	31.4	28.9	24.8	24.3	25.9	20.6	17.7	16.1	19.5	22.6	23.1	na
Foreign direct investment (% GDP)	0.3	0.3	1.1	1.2	0.7	3.5	4.8	2.9	2.8	3	2.5	2.7
Overall fiscal balance (% GDP)	-4.6	-0.4	-2.2	-3.4	-4.8	-5.3	-5.4	-3.6	-4	-3.3	-2.6	-2.4
Total government expenditures (% GDP)	42.0 (1990)	na	na	26.1	26.3	25	24.5	23.5	22.7	21.8	21.1	21.7
Total public education expenditures (% GDP)	4.61 (1990)	na	na	3.32	3.55	3.24	3.24	2.92	2.83	3.05	3.06	3.05
Total ed expenditures as % of total gov't expenditures	10.96 (1990)	na	na	12.5	13.5	13	13.2	12.4	12.5	14	14.5	14.1

Note: na = not available
Sources: World Bank 2004a, vol. 1, Annex Table C.

Poverty Trends and Drivers

Romania has had relatively low Gini coefficients (varying from 0.31 in 1996 to 0.29 in 2002), indicating modest income inequality during the transition. However, even by 2002 almost three of every 10 Romanians were poor; one out of ten, extremely poor (see Table 2.1). Table 2.1 also shows a strong association between economic growth and poverty -- namely, as real GDP growth has increased the poverty rate has gone down. It is estimated that if Romania maintains an annual 5 percent rate of growth, the national poverty rate in 2007 will be half that of 2002 (World Bank 2003).

Although unemployed, self-employed, and farming heads of household were more likely to be chronically poor, in general poverty seems transient, with large numbers of households moving in and out of poverty. Several variables predict poverty, but multivariate regressions show that the key correlate of poverty is education, with Roma ethnicity and being unemployed

second and third in importance, respectively (World Bank, September 2003). Annex G.1 shows the probabilities of being poor and the share of the total poor for different individual characteristics.

The majority of the poor are found in households whose head finished at most middle or vocational school, those with vocational training having been particularly hard-hit by the industrial restructuring occurring in Romania. An analysis of age by education and area of residence shows that the poverty risk for 15-24 year olds that are not enrolled in school and did not attend vocational or regular secondary school is very high, especially in rural areas, where their chances of being poor are over 50 percent.

Rural residents have more than double the probability of being poor than urban residents—four out of every 10 rural residents are poor, and rural areas account for 67 percent of total poverty. Since the rural poor do not benefit as much from growth as other subgroups, rural poverty is apt to be more stubborn than urban poverty. Controlling for types of primary income earners in the household virtually eliminates the poverty gap between rural and urban households, indicating that rural areas have a greater concentration of households with lower economic potential.

Hungarian, German, and Romanian ethnic groups have the same probabilities of being poor. However, Roma were 2.7 times more likely to be poor and 5 times more likely to be extremely poor, with three out of five Romas being extremely poor and only one out of five Roma not being poor. Nonetheless, the vast majority—almost 90 percent—of the poor are ethnic Romanians, and over four out of five extremely poor are ethnic Romanians.

Households headed by the unemployed, those in the informal economy as a farmer, or self-employed in agriculture have high poverty risks of between 50 and 61 percent. Those who live in the North-East have a 43 percent chance of being poor. Their risks of being poor and of being extremely poor are higher than the national average by 47 percent and 77 percent, respectively. The region accounts for 17 percent of the nation's population, but for 29 percent of its poor. By contrast, those living in Bucharest have an 11 percent chance of being poor. The city accounts for 10 percent of the population, but only four percent of the poor. Households with 5 or more members have about a 50 percent chance of being poor. Those between 0-24 years of age have over a 0.35 probability of being poor. Although gender is poverty-neutral, about one in five female-headed households is poor.

Employment Trends and Drivers

The dynamics and configuration of employment affect families' demand for education. During the review period Romania straddled two stages of economic growth—factor-driven (based on agriculture, extractive industries and small enterprises) and investment-driven (based on manufacturing, services and medium sized industries). It was basically in a low-skills, low-wage equilibrium. These realities imply a dampening effect on family demand for education and on the GoR's motivations to reform education. Internationally, transitions first into investment-driven growth and then into innovation-driven growth (based on high tech, high valued added

goods and services) accelerate employer demand for higher skills and family demand for education.

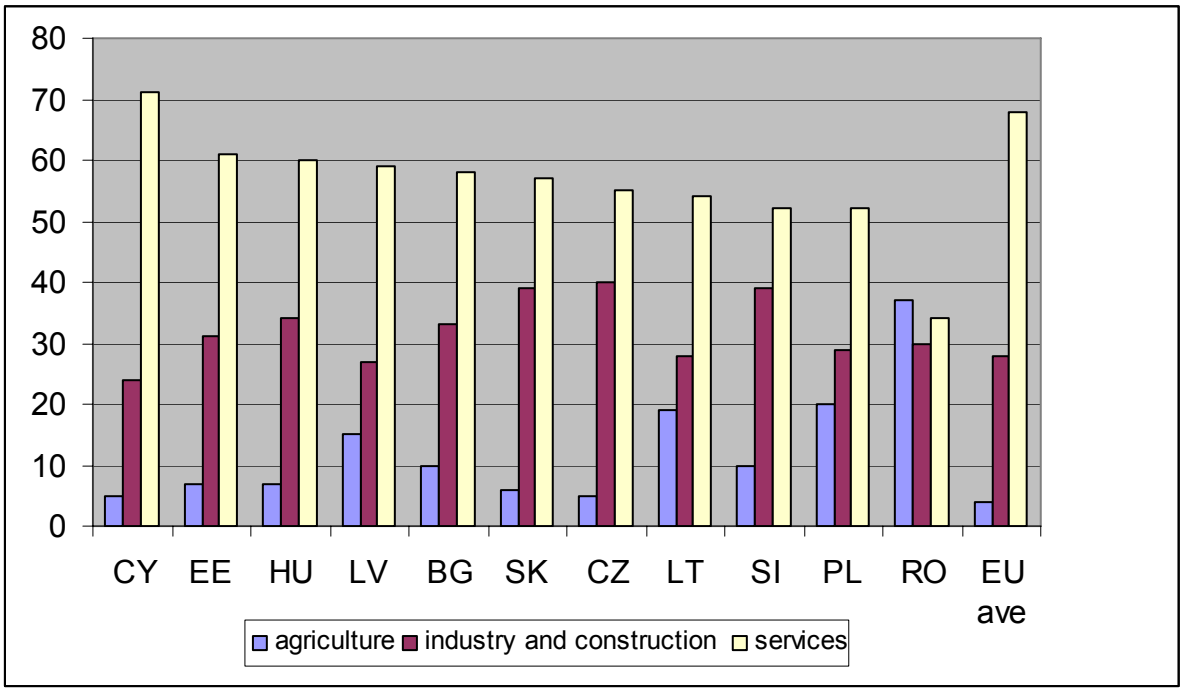
Employment trends. Since the transition Romania has seen the emergence of three perverse labor market trends: 1) migration of active workers into subsistence agriculture and other low productivity/low earnings activities; 2) declining participation in the labor force in the form of retirements, early retirements, and discouraged workers; and 3) flows out of employment and into long term unemployment (World Bank 2004a, Vol. II).

Romania's employment dynamics have closely followed its fluctuations in output and macroeconomic performance. However, in contrast to early reformers in the region, in Romania the employment dynamics and output fluctuations were driven by the effects of unsustainable macroeconomic policies on output rather than by economic restructuring. Between 1989 and 1994 Romania's strategy was to preserve employment: although Romania's economy contracted by 21 percent in 1994 relative to 1989, employment declined by only 9 percent. The brunt of the adjustment fell on wages that declined by 37 percent and on hours of work. In 1995-2001 the strategy was wage, not job, preservation. By 2001 the adjustment in employment was significantly larger than that of output: employment declined by 22 percent and output by 14 percent relative to 1989 levels. However, the decline in wages in 2001 relative to 1989 remained unchanged at 37 percent.

Inter-sectoral labor market adjustment and sectoral employment imbalances. During the review period inter-sectoral labor market adjustment and sectoral employment imbalances in Romania evidenced alarming trends. Figure 2.1 compares the structure of employment in Romania with that of EU accession and candidate countries and the EU15. Dominated by agriculture and low-tech industry, Romania's economy consists disproportionately of relatively low value-added (lower skill) activities. Its structure of employment differs dramatically, not just from that of the EU15, but also from that of its regional neighbors. Romania is the only country in Central and Eastern Europe in which agriculture employs the highest proportion of workers, and since reallocations of labor in the other sectors have been limited, agriculture has become, de facto, the labor employer of last resort.

The continued dominance of unskilled labor-intensive products is in sharp contrast to the experience of most other CEEC countries that have quite quickly closed the initial gap between a relatively highly skilled labor force and a high volume of unskilled labor-intensive exports (World Bank 2004a, Vol. I). This process was aided by foreign direct investment flows that were initially related to privatization sales to strategic investors and, as the policy framework improved, to "start up" investments. The divergence between Romania's export basket and its relative natural resource and human capital endowments is an indication that government policies have prevented the emergence of competitive markets that would reallocate resources from sectors with low productivity to sectors with a potential comparative advantage.

Figure 2.1. Employment by main sectors in the EU accession and candidate countries, 2002 and EU average, 2001.



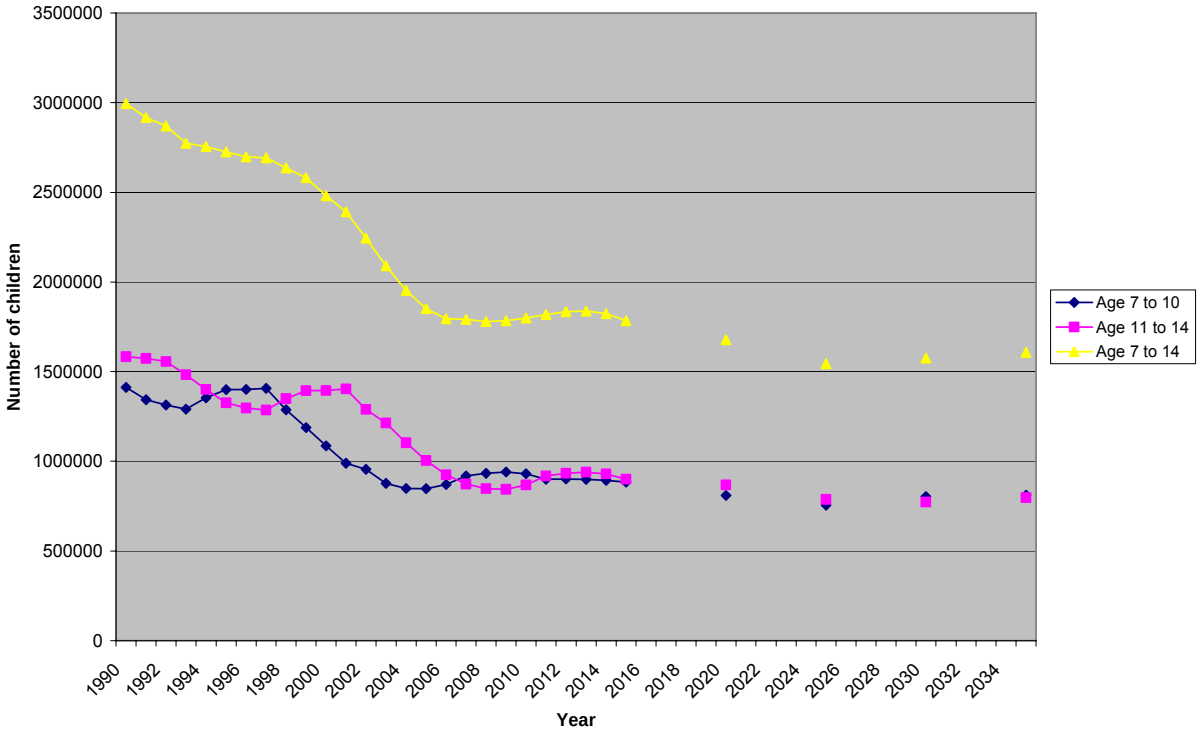
Source: Hazans, based on *Comstat* 2003/2. Prepared for World Bank 2004c. *Key*: Cyprus, Estonia, Hungary, Latvia, Bulgaria, Slovakia, Czech Republic, Lithuania, Slovenia, Poland, Romania and European Union (ave).

Demographic Trends

Figure 2.2 shows that between 1990 and 2035 the number of basic school age children is projected to decline from 3.3 million to 1.8 million—a 45 percent decline. However, most of this decline will have occurred by 2005, with the population of basic education age in 2005 being 37 percent less than that in 1990. Although the basic school age population is projected to continue trending down until 2030, the downward trend is much more gradual between 2005 and 2030 than between 1990 and 2005. Declines this dramatic constitute challenges and opportunities for the sector. Romania's demography promises a significant savings dividend if the Government can adjust the size of its educational labor force and close and consolidate schools to capture the reduced costs of smaller cohorts.[4]

[4] For example, between 2000 and 2015 the number of 6-14 year olds is projected to decline by about 730 thousand children. In 2000 the unit cost of a basic education student was $158 at the lei/dollar exchange rate for 2000. If there could be a one-to-one saving, the savings of this smaller cohort in 2015 would be $115 million at the unit cost prevailing in 2000. In fact, of course, some inputs (schools, teachers) are "lumpy", and the system will have to absorb some of the loss in student numbers through smaller classes and schools, not fewer classes or schools.

Figure 2.2. Demographic Trends: 1990-2035



Sources: National Institute of Statistics, *Romanian Statistical Yearbooks*, for figures from 1990 to 2002; World Bank HNP Statistics for projections from 2003 to 2035. ***Note:*** After 2015 only five year projections are available.

EU Accession Process

Romania applied for EU membership in June, 1995. In December 1999 the EU Council of Ministers opened EU accession negotiations with Romania, formally concluding them in December 2004. The signing of the accession treaty with Romania is scheduled for the spring, 2005. Entry into the EU is scheduled to occur on January 1, 2007, although the European Commission has introduced a safeguard clause that would allow the EU to delay Romania's entry into the EU by one year if Romania fails to meet its reform commitments, especially in the judiciary and public administration.

Government policies and actions are driven by the EU accession process, specifically by the EU's *Acquis Communautaire* that is designed to bring new entrants' practices in line with those of EU countries. Unfortunately, the *Acquis* does not provide a coherent strategy for social policy issues, including health, education, and poverty reduction. These issues have been left mostly to the individual countries. The run-up to accession has consequently "crowded out" Government's attention to a number of areas outside the *Acquis* that are critical for Romania's sustainable development, including education. Section 4 shows that EU accession poses a significant unfinished education agenda for Romania. Its 15 year olds—i.e., those that had just completed basic education—performed poorly on an OECD learning assessment particularly relevant to EU

accession (OECD, 2001). About 70 percent scored below the level that seems required in order to function in a modern workplace, in contrast to 37 percent of EU 15 year olds.

NATIONAL GOALS FOR ACCESS AND QUALITY OF BASIC EDUCATION BEFORE AND AFTER 1990

Start of the Transition

Education, especially participation and completion rates, was one of the triumphs of communism and a matter of national pride. At the time of the transition in 1989, the statistics indicated that Romania had generally universal adult literacy; children and youth of both genders had high participation and completion rates, especially at the basic education level of education; teachers came to work; students had textbooks; and repetition and dropout rates were low. Although the statistics had to "look good" in countries under communist control, these "facts" were nonetheless broadly correct.

However, the post-communist period posed major challenges to the region's highly centralized and ideological education systems, including Romania's.

Romania's organization of teaching and learning did not fit its economic and political future. Educational quality is contextual. It is not a constant under all conditions. Curricula and pedagogies that were well suited to Romania's planned economy and authoritarian political system were not a good match for a market economy and an open political system. Prior to the transition Romania's education system featured teacher-centered pedagogies and memorized factual, ideological, and procedural knowledge. Ideology dominated curricula and teaching methods, excluding any questioning, initiative, and critical thinking. In contrast, the continuous changes characteristic of market economies and the questioning characteristic of democracies require strategic skills, such as knowing-how-to-learn skills, problem solving skills, and evaluative skills. Such skills are developed under pedagogies different from those employed under a regime of memorization.[5]

Equity matters: EU economies are unforgiving of large variations in human capital. Education in Romania was never as equitable as the mythology of communism would have had its citizens believe, but ideologically-set wages and compressed wage scales minimized the penalties for variations in human capital. Market economies, especially those characteristic of the EU countries, depend heavily on high levels of human capital. They penalize low levels of human capital with lower wages, higher probabilities of unemployment, and higher probabilities of intergenerational poverty.

Fiscal adequacy and sustainability matter. At the start of the transition Romania had no experience in or need to evaluate the adequacy and sustainability of education funding. Planners, not market forces, determined wages, subsidies, and prices.

[5] For example, knowing-how-to-learn skills develop when students assume responsibility for learning under the teacher's guidance and the teacher focuses, not on facts and getting "right" answers, but on alternative ways to approach problems.

Prices matter, putting a premium on efficiency. There was no mechanism for determining the total costs of anything and no incentives to contain costs. Romania used inefficient input norms, where allocation decisions were made in physical terms without the intermediation of prices or budgets. It lacked the information, managerial skills, and incentives needed to improve productivity. These inherited inefficiencies were to collide during the 1990s with higher prices for some inputs, especially energy; reduced public financing for the sector; and declining student age cohorts.

Governance was highly centralized; the sector was administered, not managed; the concept of accountability to beneficiaries and citizens was alien. The sector started the transition with non-transparent governance, inefficient management, and an absence of accountability to a range of key actors for the costs and quality of educational services. Schools had no autonomy for planning or implementing their budgets. Education management was highly centralized, only top-down approaches in decision making being permitted. Public consultation on education matters was virtually nonexistent before 1989.

Reform Phases

Despite its communist legacy, Romania was among the first Central and Eastern European countries to initiate a comprehensive, large-scale education reform. Education has moved to a system with a flexible national curriculum, alternative textbooks, a private textbook publishing industry, and a national assessment and examination service. The education system has also made some progress in reforming teacher training, education management and school finance. These reform policies have been implemented in different ways over time, reflecting a sequence of stages within a long-term process[6]:

1990-1995: A clarifying/preparatory phase in which Romania tried to get rid of the most egregious communist ideology in the curriculum, textbooks and in the design of the system. The Institute for Educational Sciences (IES), a critical player in framing and implementing the reform in subsequent years, was established. The World Bank conducted its first exploratory missions to support Romania's efforts to reform education in Romania. These efforts culminated in the World Bank' funding of the Education Reform Project (ERP), structured to support a systemic reform of the pre-tertiary education system.

1995-2000: a development/systematic construction phase in which the reform started being implemented under the ERP. The content and the approach on education was modernized and new legislation adopted (the 1995 Education Law; the 1997 Teaching Staff Statute). Emphasis was put on issues of quality assurance, such as changes in the curriculum, assessment and examinations, and new concepts of teaching and learning embedded in alternative textbooks, and on human and material resources (capacity building and logistic preparation). Since 1998, Romania has had its first national curriculum for compulsory education and has been accumulating experience in applying it. In order to manage reform in the framework of large–

[6] See Annex Table A for a detailed timeline of events

scale projects, education reform institutions were created.[7] The issue of Roma access came into the national dialogue as a political issue.

2000-2005: a phase of relative stability with more emphasis placed on equity issues, including governmental programs fostering equal opportunities, and increasing access and retention rates.[8] Efficiency issues were also addressed and included implementation of new mechanisms for financing and management, strengthening quality control, and promoting new relationships between school and community based on accountability and effective partnerships.[9] However, there were some reversals at the top of the system, with many reform initiatives (especially those involving the curriculum) being stopped and others reversed. These measures have led to large and intense public debates and national dialogue that will probably lead to putting the education reform back on track again and strengthening future educational policies and actions.

WORLD BANK SUPPORT FOR EXPANDING AND IMPROVING BASIC EDUCATION

The World Bank started helping the Government of Romania (GoR) reform basic education from early in the transition. In the early 1990s a group of Romanian education experts based in the quasi-autonomous IES approached the World Bank. They sought support for an education reform project that would aid in the transition from a communist to a capitalist system. The Bank's 1991 sector work showed that that the sector needed a comprehensive approach to reform, with key priorities in the areas of pedagogy and curriculum (World Bank 1991). In-service teacher training was seen as key to implementing the new curriculum and to acquiring a more student-centered style of teaching and lessons in developing school-based curriculum.

Accordingly, Romanian experts and World Bank staff developed a broad project to improve the quality, content and delivery of compulsory education and to reform secondary vocational education. The proposed loan amount was US$150 million, but at negotiations in 1994 at the insistence of the Ministry of Finance (MoF) this loan was scaled down to US$50 million (with a Government contribution of US$23.5 million). The planned information technology component was eliminated on the assumption that it was premature. The allocation to the in-service training component was drastically reduced, with the GoR committing itself to finance the bulk of the in-service training so critical to the success of the overall reform. (In the end, this commitment was not honored to the subsequent detriment of the ERP.) The final project design centered on two components: (i) raising the quality of basic and secondary education, and (ii) improving education financing and management. The first component included five subcomponents: curriculum development, teacher training, assessment and examinations, occupational standards and assessment (for secondary education) and textbooks. Component two focused on issues of resource allocation, management and mobilization and coordination and implementation of the project. In July of 1999, the Government requested that the ERP be restructured to include a

[7] These included the establishment of the National Curriculum Board, the National Assessment and Examination Service, the National Council for Management and Financing, and the National Council for Textbooks.
[8] Examples of policies were the school consolidation program, the busing program, the "bread and milk "program, and ITC programs.
[9] These relationships are being developed within the Bank-financed Rural Education Project.

rural subcomponent, financed by reallocating ERP funds and serving as a pilot initiative for the Rural Education Project (REP) under development (see below).

At the same time, school facilities were badly deteriorating. On the heels of a long period of little new construction or maintenance of existing schools, the economic crises of the transition period left few resources for routine school maintenance and rehabilitation. To assist the government in upgrading the facilities of some 900 schools the School Rehabilitation Project (SRP) was signed in 1997 in the amount of US$70 million (with a Government contribution of US$36.6 million). The objectives of the project were to: (i) rehabilitate, upgrade and furnish pre-university schools, thereby restoring safety of school buildings in imminent danger of collapse, and mitigating the educational disadvantages to students occupying such schools; and (ii) improve Government's institutional capacity at national and district levels to plan, develop and maintain the public educational physical plant.

In 1999 the MER pushed for a Rural Education Project in order to reduce inequities between rural and urban schools that were contributing to high levels of poverty in rural areas. The Bank's interim response was to reallocate ERP funds for a pilot rural education project (see above). After delays stemming from tenuous macro-economic conditions, the project loan was ultimately signed in 2003 for the amount of US$60 million, with US$31 million in Government contributions. The project's overall objective is to improve access to quality education for rural students, as measured by higher achievement scores and completion and transition rates in these schools. Its four project components aim to: (i) improve teaching and learning in rural schools, (ii) improve school-community partnerships, (iii) strengthen monitoring, evaluation and policy-making capacity, and (iv) strengthen project management capacity.

As noted earlier, the Roma have significantly higher poverty rates and lower levels of education than ethnic Romanians. The Roma did not enter the Bank's first three pre-tertiary projects as a targeted group, although an EU PHARE project focused on the Roma in schools (see Annex B2). The Bank is now (as of 2005) developing a cross-sectoral project that attends directly to the education and health needs of this population.

3. SUMMARY OF RECENT CHANGES IN BASIC EDUCATION IN ROMANIA

What actions have the GoR and the MER taken that might affect basic education? These actions—legislative, capacity building, policymaking, implementation—are summarized under the topics of governance, financing and financial management, human resource management, and teaching and learning. What have been the effects of these actions on basic education? How sustainable might they be?

GOVERNANCE[10]

The governance story for the last 15 years has two strands. One is at the level of the school and local government.[11] The changes here are tentative, but the direction is clear: local players

[10] The discussion of decentralization in the governance and financial management sections relies heavily on World Bank 2002.

(local government, school principals, teachers, parents, and students) are gradually shifting away from a passive, "command and control" culture to a more active management culture with more opportunities to innovate and clearer accountability for students' learning outcomes. Several Government, donor, and NGO actions have been designed to spur this shift in culture.[12]

The second strand is decentralization of the sector, a policy in the right direction but whose framework remains confused. Romania does not have a clear internal political imperative for decentralization and has not treated it as a priority. Accordingly, progress has been slow and mixed, with half-measures introduced and policy inconsistencies unresolved. The country's decentralization pace has affected the education sector in two ways. Since the GoR has failed to propose a vision for how the country's highly centralized system of territorial organization and management of public services would be reformed, the MER's decentralization efforts have had to conform to existing institutions. The result has been the preservation of a strong *judet*-level, deconcentrated government, including the School Inspectorate that exercises extensive managerial, budgetary, and control responsibilities over schools, including the right to appoint teachers and school directors.

The MER has also not adequately prepared itself institutionally for decentralization. Under decentralization its role changes from administrating to steering. For example, this role requires that it create policy and financing frameworks to support sectoral goals and publish feedback on system performance relative to these goals.

The sector now does have some steering mechanisms in the form of national boards or councils to guide and coordinate different policy domains, although these organizations do not seem well integrated with MER's operational departments. However, MER and other key actors have made little progress in adopting a proactive management culture based on feedback on the performance of the system, policy analysis, and strategic planning. The MER either lacks feedback on the system or fails to use available information strategically. MER still does not have a policy analysis and strategic planning capacity, although an expert consulting team funded by DfID tried to help the Ministry establish this function. It does not have a management culture of analyzing data to assess and improve performance, as indicated by the fact that the MER falis to mine the rich feedback available in Romania's learning assessments and examinations. The Ministry attends only to the selection aspects of the 8th and 12th grade (*capacitate* and *baccalaureate*) examinations, not to what analyses of results indicate about the

[11] Local governments in Romania consist of counties (*judeţ*) and local councils which are comprised of municipalities (*municipiu*), towns (*oraş*) and communes (*comună*), consisting of one or more villages (*sat*). In 2001 there were 42 *judets*, including Bucharest, 88 municipalities, 175 towns, 2,688 communes, and 10,049 villages. At the *judet* level there are both elected councils and appointed state administration agencies. Municipalities, towns and villages have the same legal authority. There is no formal hierarchical relationship between the *judet* level and the local councils, except for the distribution of specified budget transfers made by *judets* to local councils.

[12] For example, the MER has given teachers the choice among alternative textbooks for each subject and grade and schools control over 30 percent of the curriculum—although the Minister of Education for 2000-03 cut the percent of "local option" in the curriculum from 30 to 5 percent.

system's strengths and weaknesses. It seems to completely ignore the results of the 4th grade assessment and international assessments in which Romania has participated (TIMSS, PISA, PIRLS), although the latter allow comparisons between countries that yield rich insights into the sector's strengths and weaknesses that yield rich insights into the sector's strengths and weaknesses.

"In the case of international assessments, they try to shove the results under the rug because Romania is not performing well. The Rural Education Project will fund analyses of these data, but it is not yet clear if there will be policymaker demand for the analyses." (Case Study Interview)

At the same time, Romania has been pursuing education decentralization for some years. The 1991 Constitution stipulated that responsibility for managing local affairs, including the initial years of formal education, was to be delegated to local governments. However, the enabling legislation was not passed until later in the decade. The transfer of responsibility happened in stages. The 1995 Education Law transferred the responsibility for maintenance of pre-university buildings – preschool, primary, and secondary schools – to local authorities. The MER and its county-level Inspectorates retained responsibility for management and financing of all other educational inputs, including teacher salaries, textbooks, and other educational materials. The 1998 Law on Local Public Finance made local councils (municipalities, towns and communes) responsible for financing most educational inputs for pre-university except teacher salaries and benefits, textbooks, and student scholarships.[13] However, these budget items remained centralized under the MER. The 2001 Emergency Ordinance calls for *all* operational expenditures for pre-university education to be made from local council budgets, and stipulates that public financing of education in the aggregate total at least 4 percent of GDP.[14] The Emergency Ordinance requires the MER, the Ministry of Public Administration, and the Ministry of Finance to issue detailed "methodological norms" on the implementation of the Emergency Ordinance.

The Methodological Norms for Financing State Pre-Academic Education specified norms for class size, teaching time for the class, the teaching load for teachers, and non-teaching staff. They stipulated three kinds of financing: central, complementary, and own resources.[15] Since

[13] Annex 2, Chapter II of the Law describes these responsibilities of local councils for financing pre-university education in the following terms: "Local budgets shall finance the expenses for maintenance and administration, for current and capital repairs, for certain investment expenditures approved according to the law, for connections to the natural gas network, water supply, or other works for improving the heating installations in pre-university educational units, as well as other expenses provided by the law."

[14] Ordinance No. 32 of February 26, 2001 amended the 1995 Education Law and called for financing most activities of preschools, primary schools and secondary schools from local council budgets. Although it was meant to apply to the 2001 budget, this Ordinance was not operational until the MER developed instructions for implementation of the law. These "Methodological Norms" for implementation were adopted by the Council of Ministers on June 7, 2001. The amended law specifically excludes expenditures for internationally financed projects, student transport subsidies, foreign student scholarships, implementation of national examinations, and teacher training. These activities remain centrally financed under the MER budget – or, in the case of student transport subsidies, under the Ministry of Transport

[15] *Complementary financing* for educational materials other than textbooks and other "service costs" of schools, including maintenance, rehabilitation, and utilities, are financed by local governments from their own budget resources, based on the budget proposals from individual schools and budget guidelines provided by the Ministry of Public Finance in each year's Budget Law. *Own financing* consists of the schools' own extra-budget revenues that

most local governments lacked the resources to finance significant education expenditures, the Norms ruled that the largest items of education expenditures (teacher salaries and benefits, textbooks, and student scholarships) would be financed from locally-collected value added tax (VAT) revenues that otherwise would be remitted to the central budget. Thus, in essence these crucial expenditures remain centrally financed. The percentages of the locally collected VAT to be retained by each *judet* vary by *judet* and are published in each year's Budget Law, the average percentage retained by the *judets* for these purposes being 63.5 percent in 2001.

The newest legislative framework is inconsistent and confused and lacks a clear vision of education decentralization. In principle, local governments finance pre-tertiary schools from their own resources, an arrangement that should provide compelling incentives for local governments to provide education in the most cost-effective way. However, this incentive is undermined in two ways. First, local governments' discretion to manage education resources—including the discretion to consolidate schools and reduce staffing—is circumscribed by the centrally mandated norms and by the requirement that the MER's Inspectorate approve any proposals for teacher dismissals, school closures, or school consolidations.

Second, the compensatory financing formula treats existing teacher costs as non-discretionary, effectively making up the difference between teacher salary costs and the municipality's own revenues, as long as service delivery is within the designated standards or norms. This arrangement legitimates what may be inefficient delivery of education. It provides neither the incentives nor the means for local governments to reconfigure education delivery to reduce costs and maintain (or improve) teaching quality.

This situation reflects a more basic tension in roles between the central education authorities and local governments under the current decentralization legislation. Local councils are responsible for managing and financing pre-university schools, but school principals and most school teachers are hired by and report to the MER's *judet* Inspectorates. Local councils are responsible for delivering pre-university education, but the MER is responsible for standard setting and quality control in pre-university education. The MER has student assessment capacities (NAES) that could serve as an effective tool of quality assurance. However, it still relies largely on input controls (restrictions on class sizes and teaching loads) and regulation as instruments of quality assurance. Meanwhile, quality differences among schools have grown as a result of diversified financing of education and differences in the fiscal capacities of communities and households.[16]

FINANCING AND FINANCIAL MANAGEMENT

Financing. Romania's fiscal history and current EU-focus have affected the resources allocated to the education sector. As Table 2.1 showed and Figure 3.1 reveals, between 1990 and

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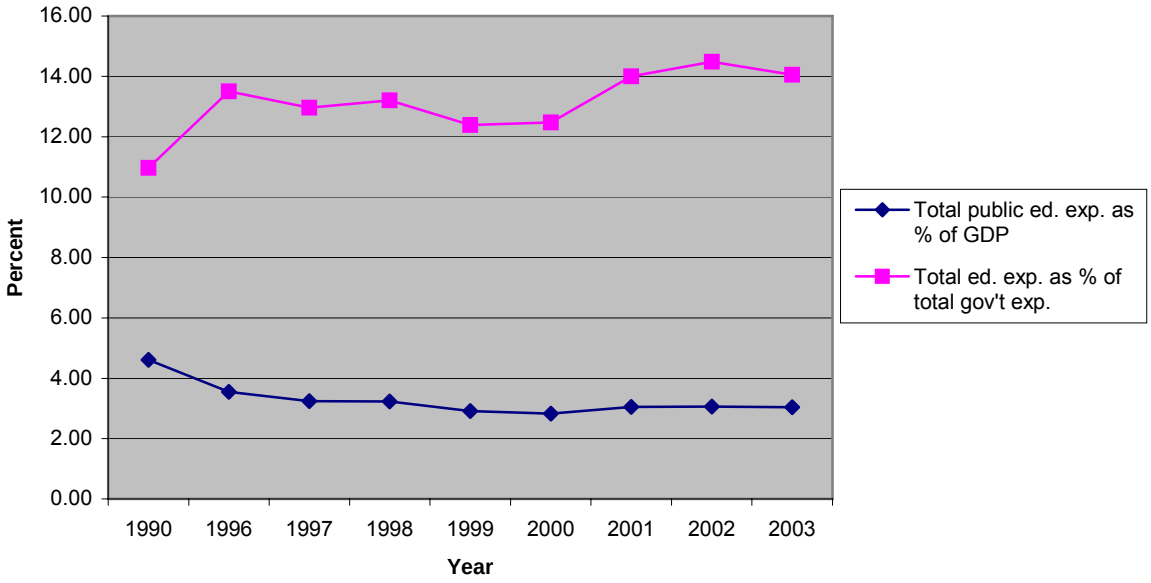
they can retain and use for special examinations and diplomas as long as these funds are spent on activities included in the approved budget of the school.

[16] In 2001, the equalization grant was modified to reflect differences in projected revenue capacity and less to differences in expenditure needs, since the latter are now provided for largely through the variable proportions of the VAT retained by each *judet.* However, the revenue capacity of the various *judets* differs widely, and compensatory mechanisms in the decentralization law do not compensate fully for these differences.

2000 sector financing declined from 4.61 percent of GDP in 1990 to a low of 2.83 percent of GDP in 2000. As of 2001 education's share of GDP rebounded to 3.1 percent, but this was far below that of neighbor countries and the OECD average (See Table 3.1), and a third less than in 1990.

Figure 3.1. Public Education Expenditures as Percent of GDP and of Total Public Expenditures



Source: Annex C.

Table 3.1. Public Expenditures in Education as % of GDP by Country and Average for OECD

Country	Public Expenditures in Education as % of GDP (2001)
Czech Republic	5.2
Hungary	5.1
Poland	5.6
Romania	3.1
Slovak Republic	4.0
OECD (average)	5.3

Sources: Table B.4.1, OECD , 2004; Annex C.

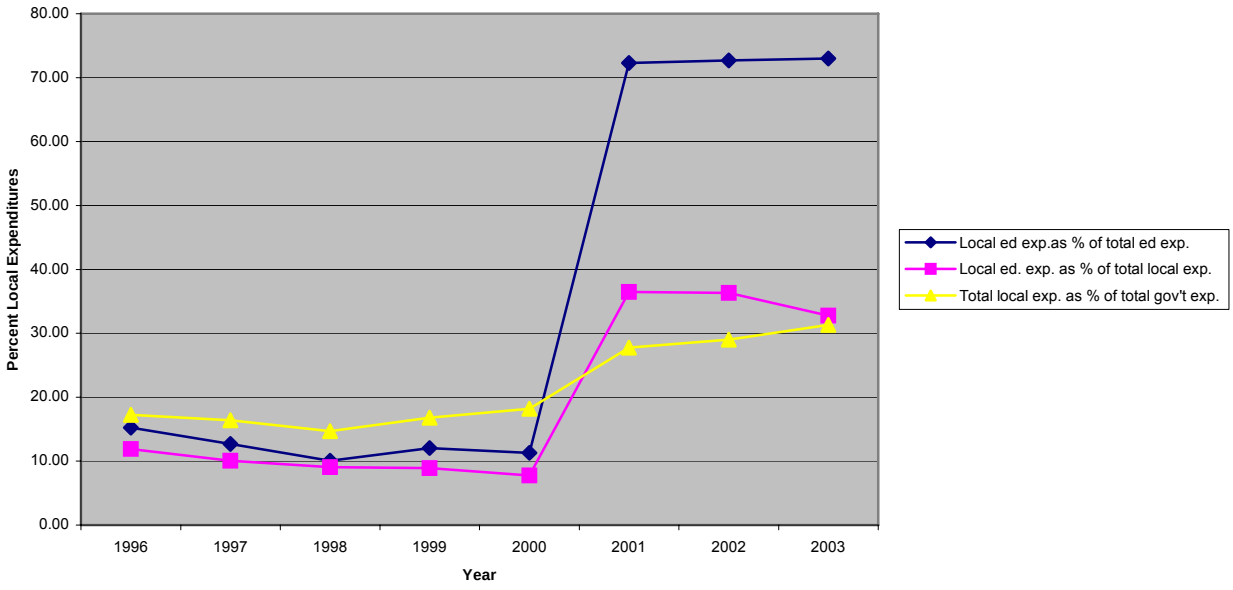
However, Figure 3.1 also shows that Romania's fiscal effort is a respectable share of total government expenditures. In 2001 the OECD average public expenditure on education as a percent of total public expenditures was 12.7 percent; Romania's, 14 percent. Romania's public revenues as a share of GDP—the total public "take" out of gross domestic product that affects spending potential—is lower than for most European nations or regional neighbors.

The percent of total education expenditures going to basic education is relatively low (39 percent in 2003), but gradually increasing between 2000 and 2003. (See Annex C.) In contrast, Croatia spent about 48 percent of its total education expenditures on basic education in 1999; Poland in 2000, about 50 percent. As a share of the average unit cost for all students enrolled in

all levels of education (pre-school to university), per capita expenditures for a basic education student increased from 69 percent in 2000 to 82 percent in 2003.

Figure 3.2 shows the fiscal impact of decentralization. In 2000 local fiscal responsibility for pre-tertiary education ballooned to over 70 percent of total public education financing and was almost 100 percent of basic education financing. There are significant variations across districts in the per capita expenditures for basic education, but these differences declined over the period 1999 to 2003. (See Annex G.2 for more details).

Figure 3.2. Trends in local expenditures (1996-2003)



Source: Annex G2.

Financial management. In the absence of prices, the sector had few incentives prior to the transition to use inputs efficiently. Since 1990, the sector has faced major fiscal challenges to which it either has not responded or responded inconsistently.

The fiscal response expected under circumstances of declining resources would have been to assess the sector's use of resources in order to rationalize the use of inputs, protecting those inputs key to equity and quality. Although MER has cut inputs or prices for inputs, there is no evidence that it tried to adjust *strategically* to its shrinking annual allocation.

Since 2001 the sector could have argued for a larger share of public expenditures assuming that it could construct a solid business case for them. Romania's macro-economic policies have stabilized, inflation has declined dramatically, a smaller share of public resources is being used to bail out failing SOEs, and economic growth has resumed. One fiscal response expected under these circumstances would be to model the fiscal adequacy and sustainability of the sector's financing under alternative packages of assumptions (scenarios). There is no evidence that MER has tried to assess whether it had grounds for arguing for increased allocations.

Successful decentralization requires a fiscal framework that: 1) ensures that the resources at each level are commensurate with the new distribution of functional responsibilities (vertical balance); 2) creates local incentives to meet national goals for the sector; and 3) adjudicates horizontal imbalances. The MER has struggled to deal with the fiscal implications of decentralization, but its response has lacked coherence.

The GoR has tried to deal with the problem of horizontal imbalances by continuing to finance teacher salaries, student scholarships, and textbooks centrally. This decision has been pragmatic: it ensures that primary and secondary education schools continue to operate throughout the country, despite substantial differences in revenue raising capacity among localities. The Government's decision to adopt a mandatory financing mechanism (the retained portion of locally-collected VAT revenues) in place of the former discretionary equalization grant reflected the lessons of experience: local governments did not use the equalization grant as intended. This change constitutes an improvement on the financing mechanism.

However, the current financing formula fails to solve fundamental problems. It does not create the fiscal incentives for local governments to deliver education as cost-effectively as possible—e.g., by consolidating schools and busing students, busing teachers, or using multi-grade teaching in small schools. (See the discussion of governance.) Its treatment of the horizontal imbalance problem is also partial. Important educational inputs, such as learning materials other than textbooks, programs for poor students and at-risk students (including Roma), and incentive payments for teachers serving in difficult schools, are locally financed. These needs are greatest in the very localities with the lowest household incomes, governmental revenues, and educational performance. Teacher training, although centrally financed in principle, is in reality not provided any significant financing under the central budget. Thus, the financing of this function de facto falls on local governments that vary in their revenue-raising capacities.

Romania has yet to adopt the simplest means of providing efficiency and quality incentives: a differentiated capitation system of financing. This mechanism pays providers based on the number of students enrolled in each type of program and reflects intrinsic sources of higher costs, such as dispersed populations that are more expensive to serve or a higher-than-average density of students with specials learning needs. At the same time, the MER has been making a serious effort to elaborate such a system of per-student formula based on actual school-level expenditure data.

HUMAN RESOURCE MANAGEMENT

Progress on rationalizing the education sector's human resource policy package has been partial and halting.[17] Teachers are governed by a Teachers' Statute backed by the trade unions and teachers in Parliament that badly needs reform. Since teachers are not civil servants, civil service reform is not directly relevant to education. At the same time, a rationalized civil service

[17] Human resource packages include a number of policies—hiring criteria and measures, definitions of working hours, professional development, performance evaluation, career ladders, separation and retirement, and compensation.

can establish de facto standards for the human resource management of public sector employees outside of the civil service. Unfortunately, the GoR's implementation of the spirit of the 1999 civil service reform law has been slow and ragged.

Professional teaching standards. The MER has made some progress in defining professional teaching standards. Such standards constitute performance criteria for pre-service training programs, hiring criteria, criteria for certifying probationary teachers, and criteria for evaluating practicing teachers and customizing their professional development. In response to pressure from the teachers' unions, Parliament rejected an initiative (Emergency Governmental Order 91/2000) to change the law to introduce a standards-based training and evaluation system for teachers. Despite this set-back, in June 2001 the GoR established the National Center for Teacher Training (Government Resolution 604) as an institution subordinate to the MER. In 2002 MER developed, published, and distributed 21,000 copies of the *Professional Teaching Standards* that defines standards for the teaching profession and a standards-based approach to teacher certification for the *Definitivat*.[18] The (proposed) new-style assessment had three parts: a portfolio produced by the junior teacher, a special inspection of classroom performance, and a written examination set by a special commission of three persons (two academics and a school teacher in the same discipline as the examinee). All three components were weighted equally.[19] However, this standards-based approach to awarding the *Definitivat* is not yet in place.

Pre-service training. The MER has made little progress in reforming the pre-service training system that feeds the teaching corps. Romanian education experts and Bank staff assess its status as "a disaster". Unfortunately, as already noted, the MER tried and failed to establish a standards-based evaluation system for teachers that could have been used to create powerful incentives for providers to improve pre-service training.

In-service professional development. The design of Romania's education reform had the minimum required constituent parts (the "iron diamond"), each of which had to be aligned with the others for the whole to work: curricular reform based on learning standards, textbooks aligned with the new curriculum, in-service training to help teachers change their practice to reflect the new curricula and pedagogy, and assessment and examinations aligned with the new learning standards. In-service training was the "broken leg" of this iron diamond that many experts blame for the fact that Romania's TIMSS scores (1995, 1999, and 2003) have remained flat.[20]

In 1994 the GoR committed to finance most of the planned in-service training for the reform (see section 2). However, in the end, serious fiscal problems meant that it failed to do so. Available Bank financing had to be used to conduct emergency two-day orientation (not training) of teachers, using the cheaper but flawed cascade model. Late into the reform (2001), MER finally issued a Ministerial Order that clarified policy and began to rationalize the in-service training system. It established the National Center for Teacher Training, giving it

[18] The "Definitivat" is Romania's "definitive" certification for the teaching profession, awarded after a probation period of 2 years of classroom teaching.
[19] ERP supported this new approach, with 464 faculty members in 14 university centers being trained as mentor teachers and 57 university methodologists being trained in connection with the new Definitivat standards.
[20] Several other factors probably also account for the flat TIMSS scores. See section 4.

responsibility for accrediting in-service programs. It made 90 units of development training compulsory for all teachers every 5 years, splitting the 90 units of required training between the universities (46 units) and the *judet*-based teacher training centers, Casa Corpului Didactic (44 units).

However, MER and local governments are not really effectively managing the skill levels of the teaching force. Building capacity for a standards-based, student-centered education system needs a strong network at the school level. Such a network is not now in place, and the financing for the kind of on-going local support that is required to impact teacher behaviors and student learning styles is not secure. There are also still many unqualified teachers, especially in rural areas, where it is difficult to attract and retain qualified teachers. There is presently no formal mechanism for these teachers to become qualified unless they leave their jobs and return to university study, a solution that they cannot afford and that would be catastrophic for rural schools.

Professional development of education managers. As part of the effort to shift from a "command and control" to a management culture, the MER used ERP funds to build the managerial capacities of head teachers/principals and inspectors. The reform of the school management system started by creating a new structure for the School Inspectorate that reflected a quality assurance perspective. The functions of the new Inspectorate were clearly separated into inspection, administration, and professional development. The new inspection system was introduced in school year 1998-1999 (Ministerial Order No. 4682/28.09.1998). The late 1990s saw an impressive number of training outputs.[21] Although the effects of GoR's investment in managerial training are not reliably known, there seems to have been some change in the culture of school management. The creation in 1999 and 2000 of the National Agency for Education Management increases the chances that Romania's early managerial training initiatives will be sustained.[22]

Hours of work and compensation policy. Romanian teachers have annual instructional hours of 473 (primary), about 40 percent lower than the OECD average of 803 annual hours. Lower secondary level teachers teach 525 hours annually, about 25 percent lower than the OECD average of 717 hours.

Table 3.2 shows teachers' gross monthly wages as a function of years of service and the ratio of the wage of new teachers to that for teachers with different amounts of experience (the vertical compression ratio).[23] If expected increases in pay affect retention, the vertical compression ratio can be used to assess incentives to stay. The vertical compression ratio for Romania's pretertiary teachers is very high: 2.43 for teachers with 30-35 years of experience compared to new

[21] For example, seven regional centers for education management training were set up and equipped; 33 national trainers for inspectors, 160 national and regional trainers for principals/head teachers, and 100 trainers for MIS implementation were selected and trained; 1,200 inspectors were trained on the new school inspection model stressing quality insurance tools and management; and more than 10,000 principals were trained on education management through a cascade model.

[22] The Agency has responsibility for accrediting training programs in modern education management and financing, strengthening education management programs in pre-service training, and developing professional standards for education administration.

[23] Vertical compression ratio is the ratio of the average salary for the highest ranking teachers to the average salary for entry-level teachers. Higher compression ratios suggest greater opportunity for salary growth over a teacher's career.

teachers, and 1.72 compared to those with 10-14 years of experience. By contrast, after 15 years of experience the average OECD teacher can expect a salary that is 36 percent higher than the one received at entry to the occupation (a compression ratio of 1.36).

Table 3.2. Teacher salaries and vertical compression ratios as of February 1, 2005

Years of Experience	Gross Monthly Wages (ROL)	Vertical Compression ratio
None	4,610,000	
6 to 10	6,058,900	1.31
10 to 14	7,910,840	1.72
18 to 22	9,255,125	2.01
25 to 30	10,565,000	2.29
30 to 35*	11,221,525	2.43
Economy-wide average in Feb 2005	8,748,696	

Sources: The Federation of Free Teacher Unions in Education (Federatia Sindicatelor Libere din Invatamant, FSLI); http://stiri.rol.ro/stiri/2005/04/184141.htm

Annex G.3 shows the gross monthly wage for those working in education (teaching and non-teaching staff) versus those working in other branches. The average wage in the sector is at parity with the average monthly wage in the economy. However, as a percent of GDP per capita, it is low relative to the average OECD salary (Table 3.3). It is somewhat lower than that of two regional neighbors (Czech Republic and Hungary), although higher than the Slovak Republic.

Table 3.3. Ratio of Teachers' Salaries[1] to GDP Per Capita by Country (2002)

Country	Primary/Secondary Education
Average OECD	1.33/1.37
Eastern Europe	
Romania	0.66
Czech Republic	1.09
Hungary	0.75
Slovak Republic	0.54

Sources: Table D4.2, OECD, 2004; authors. [1]Salaries for those with 15+ yrs of experience.

In the absence of teacher supply/demand analyses and comparative wage studies, it is not known if the system is able to hire the qualifications that it needs. If the sector can only attract sub-optimal qualifications because of uncompetitive wages, the low teaching hours represent one way to improve teacher wages i.e., re-negotiate the required weekly teaching hours in exchange for higher monthly wages.[24]

TEACHING AND LEARNING

Curriculum. Government's policy goals for the basic education curriculum have changed three times during the review period. Initially the objective was to update and remove vestiges of Communist ideology from the curriculum. In 1994 a National Curriculum and Teacher

[24] Longer working hours can mean fewer staff. Given that Romania's teaching force needs to shrink as the school age population declines, negotiating this option requires strategies to minimize separations (e.g., not replacing retirees) and to compensate losers.

Training Board was created,[25] and under its auspices, working groups that involved more than 1,000 teachers and researchers developed 391 subject matter curricula for grades 1-12. Subject matter curricula for grades 1-8 were completed by 1999. An additional 700 specialists from all levels of education subjected these curricula to an approval process.

By 1997 it was recognized that true curriculum reform required the creation of an entirely new curriculum structure, aimed at developing higher-level thinking skills needed for a knowledge economy. The result was the development and publication of the National Curriculum Framework (1998) that began to be implemented in the 1998-99 school year. It was immediately followed by a revision of all subject matter curricula for basic education. The new framework emphasized the development of competencies, skills and attitudes, clear curricular and achievement standards, student-centered learning, and relevance to social issues and real life. The framework also allowed teachers at the school level to use their own creativity in implementing it by dividing the curriculum into a compulsory core (approximately 70 percent of available instructional time) and about 30 percent for school-based activities. The National Curriculum Framework was a major achievement, created entirely by Romanian experts, but aimed explicitly at compatibility with European practice and standards of quality. In 2000 the GoR established the National Curriculum Council as an autonomous body that could sustain the country's curricular progress.

Sustainability of the curricular advances achieved prior to 2001 is difficult to judge. The Minister of Education in power during 2000-2003 interrupted and in some cases tried to reverse some of the curricular reform measures. For example, school-level electives were reduced from 30 to 5 percent of the curriculum, virtually eliminating the concept of teachers' initiative. In 2001 the National Curriculum Council ceased to be an autonomous body, being moved to the Institute for Educational Sciences. Changes in subject matter curricula were at odds with the conceptual framework behind the new curriculum. The weak link in the reform, teacher training, meant that the concepts and practices associated with the new curricular framework were not as rooted among teachers as they should have been. At the same time, almost 2000 teachers and educators have been involved in developing the new curricula; the National Curriculum Council continues its coordination function; the National Curriculum Framework is conceptually strong. The general view is that the reform was relatively rooted at the lower levels and survived the turmoil at the top. For example, the schools continued using the curricular guidelines that the Minister had rejected.

Textbooks. Between 1948 and 1994, textbook provision was a State monopoly with the State publishing house *(Editura Didactica si Pedagogica* or EDP) publishing, printing, and distributing a single textbook per subject, per grade. Textbook choice did not exist. These textbooks were generally of low quality in terms of content, illustration, paper and binding. The content of the single textbook was dense, theoretical, and difficult for students of average ability to understand.

On the advice of international textbook specialists, the GoR pursued major changes in textbook policy. The MER:

[25] In 1997 the Board was split into a Curriculum Board and Training Board.

- Provided a diversity of upgraded textbooks that would meet the new curriculum requirements. Teachers and schools can now choose from about three books per subject per grade in compulsory education.
- Moved textbook choice and purchasing power from the central to the school level, thereby engaging publishers in a competition to develop new textbooks. Publishers organize exhibitions each year in every *judet.* Teachers choose the books they want, order them through the local inspectorates, and the MER then enters into contracts with the publishers for the total quantities of the textbooks to be produced for that year.
- Set up the Textbook Approvals Board (TAB) in 1995. The TAB guided and stimulated an open system of national competitive bidding from State and private publishers on an equal footing, in accord with an agreed set of technical regulations, quality criteria, and price range. Evaluations were made by independent, trained panels of teachers and specialists, on the basis of agreed criteria. By 2002 the TAB and its panels of evaluators had gained considerable experience, having secured 348 new titles for basic education and reviewed 900 titles for secondary education.
- Contracted only with publishers that were not beneficiaries of budget subsidies, a decision that de facto stimulated the development of a textbook "market". By the end of April 2001, when the final bid under ERP was launched, a flourishing private textbook industry had emerged in Romania, with as many as 56 publishers taking part in national competitive bidding according to strict requirements.

The sustainability of the textbook reform is in question. The Minister of the 2000-03 period worked to change the idea of alternative textbooks, although unsuccessfully. Procurement rules, however, were changed, undoing the reform idea of evaluating and scoring the technical and price sections of each proposal separately. In an attempt to stretch resources prices for procurements were reset to a low level, with bidders eliminated if they did not meet the minimum price, regardless of the technical quality of the textbook.

Toward the end of the ERP, the TAB drafted a number of policy framework papers with important recommendations for the way forward—e.g., recommendations on the orderly evaluation and approval of titles; economic aspects (stable and equitable financing; pricing policy; and ensuring that requirements are attractive to commercial publishers); the procurement system; and delivery issues. Few of these recommendations have been followed, and the transition of the TAB and its supporting structures to the new "Textbook Evaluation and Distribution Board" in the MER involved changes that do not bode well for the sustainability of the textbook reform.

Assessment and examinations. Prior to 1994, examinations consisted primarily of oral examinations and hand-written papers. The exams and their grading were non-comparable between teachers, between schools, or across time. They were used to select students for subsequent levels of education, not diagnostically or as feedback on the performance of the system. Under the reform, it was decided that assessments and examinations should meet three purposes: certification, selection, and providing feedback on the learning performance of the system for the public. These objectives have been met and exceeded.

Two bodies were formally established in 1994: the National Assessment and Examinations Board (NAEB) and the National Assessment and Examinations Service (NAES). The NAEB coordinated the design of the assessments with ongoing reforms of the curriculum, teacher training, and textbooks. The NAES was set up as a semi-autonomous body that had the technical and administrative responsibility for examinations and assessments.

Between 1994 and 1997/98, the NAES consisted of only a small "Transitional Assessment Unit" housed in one (later two) room(s) in the Institute for Educational Sciences with only five full-time staff by 1997/98. The breakthrough came in 1998, when Government Ordinance 327 confirmed the legal status of the NAES as a semi-autonomous part of the MER with its own Director, building, staff, and budget. The NAES is now staffed with 45 persons, 30 of them professionals with specialist training in educational measurement. Their achievements have been nothing short of remarkable.

The consensus is that the NAES is highly sustainable. In general, parents, students, and teachers accept the new examinations. Few want to return to the old, non-standardized instruments and opaque procedures used by teachers in schools with test questions written on the blackboard; oral questioning, done on the basis of non-calibrated, pre-digested "tickets" *(bilete);* or marking that is non-comparable between teachers, schools, or across time. NAES has received international recognition, its leaders belonging to prestigious international assessment bodies and representing Romania on a permanent basis in international assessment exercises. At the same time, what really survived were modernized versions of selection examinations. MER policymakers do not yet use the results of assessments (the 4th grade assessment and the international assessments—TIMSS, PISA, PIRLS) as feedback on the performance of the system.

Infrastructure. A vast school building program occurred during the era of ex-President Ceaucescu. It was governed by low construction standards and without regard to rationalizing the school network. The austerity of the 1980s interrupted this program, leaving some schools only partially built, and led to deferred maintenance for all schools. At the transition the GoR inherited a mini-crisis in its infrastructure, with five percent of the schools being “in imminent danger of collapse”.

Within the framework of the GoR-World Bank loan for school rehabilitation (School Rehabilitation I), the MER’s Directorate of Investments is now using school mapping principles and cost-effectiveness analyses to allocate investment funds. A carefully nurtured collaboration between architects/engineers and educators/teachers/local officials has resulted in the development of modern construction standards and school design standards that simultaneously respect good engineering practice and educational needs. These standards have been well integrated into the operations of the MER and local authorities. Romanian authorities expect these newly developed standards and management capabilities to sustain, as indicated by their comments about School Rehabilitation I.

> “The MER is now implementing Rehab II, financed by the European Bank of Investment. The EBI is closer to a commercial bank, and the project has no technical assistance. However, after Rehab I, the GoR only needed financing. It no longer needed TA to manage school construction and rehabilitation.” (Case Study Interview)

The sustainability of the building stock—i.e., adequate maintenance—is still to be determined. Local authorities have responsibility for maintaining pre-tertiary schools. However, failure to define an adequate fiscal framework for decentralization of functions in education leaves many local authorities without adequate funds for maintenance. Poor districts are particularly affected because they are less able to lobby for funds or raise own resources for maintenance.

Rural education. As noted in section 2, in 1999 the MER recognized that the quality of rural education was lagging that of urban areas. In February 2000 it set up a National Board for the Development of Rural Education (NBDRE) to support an ERP-funded pilot focused on rural schools. Working groups were established, using specialists from IES, teachers, and inspectors. A needs assessment confirmed that the most urgent needs in rural schools were related to the lack of basic educational materials and to the limited knowledge of most teachers and school directors about the curricular reform. Most of the teachers and directors did not know how to manage the changing environment, and parents and local authorities were losing trust in the ability of their schools to provide a good education. The pilot addressed quality issues in basic education in rural schools in eight out of the 42 *judets*, focusing on teachers' and principals' training, provision of basic learning materials, and provision of equipment to be used by teachers in the production of teaching materials. Funded by GoR and the World Bank, the pilot "went to scale" in 2003. It focuses on teaching and learning and strengthening school-community partnerships in rural schools.

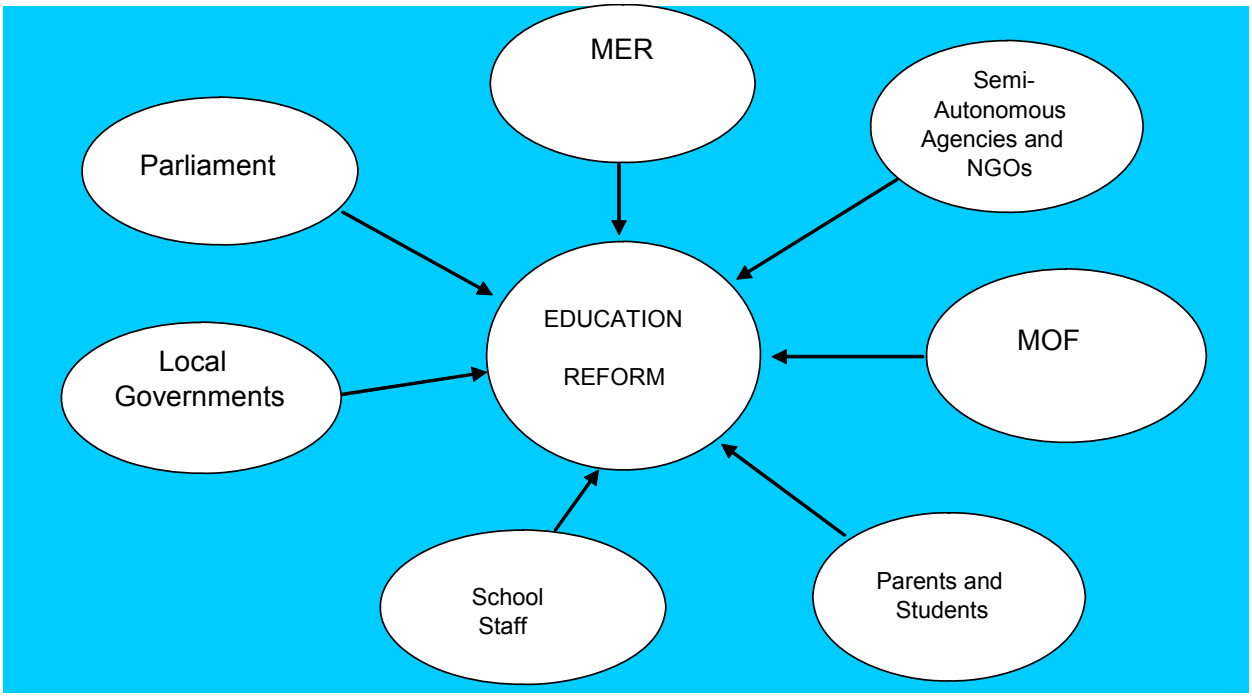
CONCLUSION

Several players were involved in Romania's basic education reform during the review period (Figure 3.3). They differed in their commitment to the reform and in the "rules of the game" (formal and informal), the organizational infrastructure, and the skills and knowledge that they built to sustain and deepen it.

The semi-autonomous agencies and NGOs provided the steadiest commitment to the reform and constituted its early technical leadership. Over the review period they built a cadre of professionals competent in curriculum design, educational measurement, teacher development, textbook quality, educational management, and rural education. Several of these individuals have become influential members of international professional associations and are in demand in the region to help other countries pursue reforms similar to Romania's.

The commitment of the MER to different aspects of the reform has varied with the party in power and the personalities of different ministers (see section 2 and Annex A.) At the same time, the very comprehensiveness of the reform meant that all ministers could find something in the reform to which they could commit (see section 6). The MER has built important capacities to guide the reform: the National Curriculum Board, the National Assessment and Examination Board and the National Assessment and Examination Service, the National Teacher Training Center, the Textbook Advisory Board (now the Textbook Evaluation and Distribution Board), and the National Board for the Development of Rural Education. These all function under the policy control of the Ministry with clearly defined roles and relationships, although sometimes the balance between them can be tenuous.

Figure 3.3. Players in Romania's basic education reform (1990-2004)



If fact, the MER still displays a tension between the old concepts of command and control and those of providing policy frameworks and oversight. Accordingly, it still lacks capacities prerequisite for it to function effectively in its evolving role under decentralization: measures of sector performance, policy analysis, evaluation, and strategic planning that are used in policy making; a strong financial management capacity that can give the MER an advantageous seat at the table in MoF budget negotiations; and a modern human resource management system.

The Parliament's role has been in the creation of a legal foundation for many parts of the reform, especially during the early, most vigorous periods. However, in response to political pressures from the teachers' unions and those Parliamentarians that are teachers, it has lagged in the legislation required to rationalize the management of the teaching force. The MoF and MER have generally not coordinated effectively on the reform. There is a natural tension between them and their objectives, since the MER has been unable to present a sound business case for its budget requests.

Relative to 1990, local governments and teachers and principals of the schools have modestly greater capacities to assume new powers and accountabilities. However, both have been caught in the tension at the central level between the old concepts of command and control and the new ones of decentralized functions and financing. As a result, neither has been able to fully exercise initiative and accountability at the local level. Again, relative to 1990, parents and students have greater voice, but it is constrained by the flawed decentralization framework within which local governments and schools are trying to function. Table 3.4 summarizes recent changes and reforms in Romanian basic education over the past 10-12 years with comments on their sustainability.

Table 3.4. Recent Changes in Basic Education in Romania

Issue	Comments	Any progress? Progress sustainable?
Governance	1. Local players (local government, school principals, teachers, parents, and students) tentatively shifting from passive, "command and control" culture to a culture with more opportunities to innovate and clearer accountability for students' learning outcomes. Trend interrupted by reform reversal in 2000-03. Constrained by confused decentralization framework.	Modest progress/ direction probably sustainable
	2. GoR has not developed coherent decentralization framework. This limits MER's ability to craft consistent framework for sector.	Some progress, but not systematic/direction unclear
	3. MER not adequately prepared institutionally for decentralization (from administrating to steering). Lacks prerequisite capacities (policy analysis, strategic planning, use of performance feedback in policymaking).	Modest progress /direction unclear
Financing	Declined from 1990 to 2000 from 4.61% to 2.83% of GDP. By 2003 budget a third less in GDP terms than in 1990. Romania's fiscal effort a respectable share of total public expenditures (14%).	No progress
Financial management	1. In face of declining resources, MER cut inputs or prices paid for inputs. No evidence that it tried to adjust strategically to shrinking annual budget.	No progress
	2. Sector can now argue for a larger share of public expenditures: stabilizing macro-economic policies, dramatic declines in inflation, smaller share of public resources going to bail out failing SOEs, and resumed economic growth. No evidence that MER has tried to construct a business case for increased allocations.	No progress
	3. Successful decentralization requires a fiscal framework that: 1) ensures that the resources at each level are commensurate with the new distribution of functional responsibilities (vertical balance); 2) creates local incentives to meet national goals for the sector; and 3) adjudicates horizontal imbalances. MER has struggled to deal with the fiscal implications of decentralization, but its response has lacked coherence.	Some progress and active effort/ Unclear direction
Human resource management		
Professional teaching standards	1. MER has made some progress on defining professional teaching standards to use as performance criteria for pre-service training programs, hiring criteria, criteria for certifying probationary teachers, and criteria for evaluating practicing teachers and customizing their professional development. Tried to change law to introduce a standards-based training and evaluation system for teachers in 2001. Parliament rejected.	Some progress/unclear direction. Teachers' unions were behind Parliamentary rejection and may continue to stall progress.
Pre-service training	2. Assessed as "a disaster". Had MER been able to establish a standards-based evaluation system for teachers, it could have been used this system to create incentives for providers to improve pre-service training.	No progress
In-service training	3. In-service training the "broken leg" of the reform. In 1994 GoR committed to Bank to finance most of the planned in-service training for the reform. Failed to do so. Available Bank financing used to conduct emergency two day orientation (<u>not</u> training) of teachers, using cheaper but flawed cascade model. Today MER and local governments not really effectively managing skill levels of the teaching force. Need strong network at school level to provide on-going support that is not now in place.	Some, but not systematic progress/ unclear direction
Managerial training	4. MER used ERP funds to build managerial capacities of head teachers, principals, inspectors. Reform of school management system started with School Inspectorate by creating new quality assurance perspective. Effects of GoR's investment in managerial training not reliably known. But seems to have been change in culture toward the concept of managing a school.	Progress/creation of National Agency for Education Management increases chances of sustainability.

Working conditions and compensation	5.Romanian teachers have annual instructional hours of 473 (primary), about 40 percent lower than the OECD average of 803 annual hours. Lower secondary level teachers teach 525 hours annually, about 25 percent lower than the OECD average of 717 hours. Apparently no supply/demand analyses or comparative wage analyses to determine competitiveness of teachers' salaries and benefits. Average wage in sector is at parity with the average monthly wage in the economy and at about two-thirds of the GDP per capita, low relative to the OECD average of 1.33 of GDP per capita. Vertical compression ratio for Romania's pre-tertiary teachers very high.	No progress. Resistance of teachers' unions will probably stall efforts to rationalize working conditions and compensation.
Curriculum	1. Government's policy goals for basic education curriculum changed three times during review period. It was recognized by 1997 that true curriculum reform required creation of an entirely new curriculum structure, aimed at developing higher-level thinking skills. Result: development and publication of the National Curriculum Framework (1998), Immediately followed by a revision of all subject matter curricula for basic education. New framework emphasized the development of competencies, skills and attitudes, clear curricular and achievement standards, student-centered learning, and relevance to social issues and real life. Allowed teachers at the school level to use own creativity in implementing it by dividing the curriculum into a compulsory core (approximately 70 percent of available instructional time) and about 30 percent for school-based activities.	Major achievement/ sustainability unclear. From 2000-03 MER some of the reforms were overturned -- e.g., school-level electives were reduced from 30 to 5 percent of curriculum; some changes in subject matter curricula, challenging the conceptual framework behind new curriculum.
Textbooks	2. From 1948-1994, textbook provision a State monopoly with the State publishing house publishing, printing, and distributing a single textbook per subject, per grade. No textbook choice. Under reform textbook choice and purchasing power moved from central to school level, thereby engaging publishers in competition to develop new textbooks. Teachers and schools choose from about three books per subject per grade. Set up Textbook Approvals Board (TAB) in 1995 that stimulated open system of national competitive bidding from State and private publishers on an equal footing. Evaluations were made by independent, trained panels of teachers and specialists, on the basis of agreed criteria. Contracted only with publishers that were not beneficiaries of budget subsidies, a decision that de facto stimulated the development of a textbook "market".	Significant progress/ sustainability in question. Attempts to return to singple textbook policy failed. Procurement rules were changed, setting quite low prices for bids, with bidders eliminated if they did not meet the minimum price.
Learning assessments	3. Under the reform, it was decided that assessments and examinations should meet three purposes: certification, selection, and providing feedback on the learning performance of the system for the public. These objectives have been met and exceeded. Semi-autonomous agency, the National Assessment and Examinations Service (NAES), has managed Romanian and international assessments (e.g., PISA) professionally.	Excellent progress/ sustainable. This agency and function left intact during efforts in 2000-03 to reverse elements of reform.
Infrastructure	4. MER started transition with infrastructure crisis. Based on SRP support, MER is now using school mapping principles and cost-effectiveness analyses to allocate investment funds. Carefully nurtured collaboration between architects/engineers and educators/teachers/local officials resulted in development of modern construction standards and school design standards that respect good engineering practice and educational needs. Standards well integrated into the operations of MER and local authorities.	Excellent progress/ sustainability likely. Sustainability (maintenance) of building stock still to be determined.
Rural education	5. In 1999 MER recognized that quality of rural education was lagging that of urban areas. In 2000 set up a National Board for the Development of Rural Education (NBDRE) to support the pilot focused on rural schools. Pilot addressed quality issues in basic education in rural schools in eight out of the 42 *judets*, focusing on teachers' and principals' training, provision of basic learning materials, and provision of equipment to be used by teachers in the production of teaching materials. Funded by GoR and Bank, the pilot "went to scale" in 2003, focusing on teaching and learning and strengthening school-community partnerships.	Excellent progress/ sustainability unknown

4. BASIC EDUCATION OUTPUTS AND OUTCOMES AND THEIR IMPLICATIONS FOR HOUSEHOLD DEMAND

What have been the outputs and outcomes of the educational system during the review period? To what extent can they be attributed to the reform? What do they imply about past and future household demand for basic education?

BASIC EDUCATION OUTPUTS

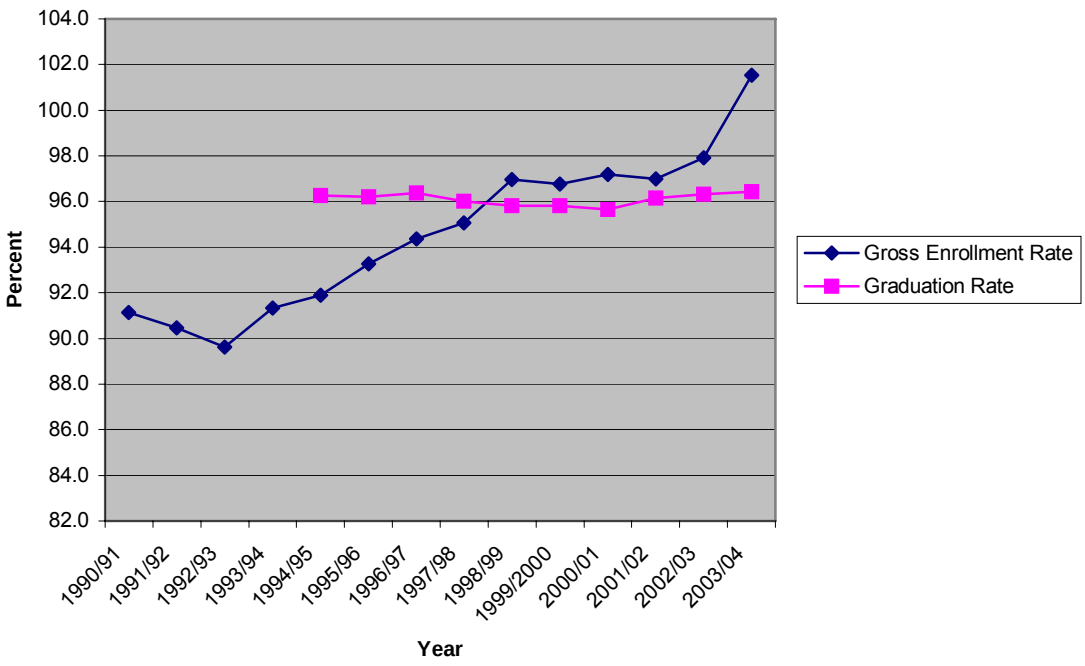
Enrollment and graduation rates for basic education. Romania started the transition with respectable gross enrollment rates for basic education and has managed to increase them steadily across the review period.[26] (See figure 4.1.) Graduation rates from 8th grade are solid at about 96 percent, but remained relatively flat from 1994/5 to 2003/4.

Special analyses of the Integrated Household Surveys show net enrollment rates for 1996 and 1998. Total net rates are very close to gross rates for these two years. Annex G.4 shows how these rates vary by individual and household characteristics. Gender has no effect, and moving from the second through the top consumption decile has only a modest effect. Rural residence depresses enrollment rates, but the effect is not large, whereas other variables have significant negative effects: being Roma, being handicapped, being extremely poor or in a household in the lowest consumption decile, having no parent that has attained more than primary education, or coming from a household with a large number of adults or children 0-14 years of age. Annex G.5 gives the results of a logistic regression of a number of independent variables on non-enrollment.

Repetition and dropout rates for basic education. Consistent with the region, Romania's repetition rates for basic education are low, stabilizing at around 3.5 percent. From 1990/91-2003/04 drop-out rates, defined as the ratio between the difference in the number of students enrolled at the beginning and at the end of the school year, remained at or below 1.5 percent. (See figure 4.2.) Dropout rates are notoriously difficult to measure accurately, especially in countries with high rates of migration and emigration. However, Romania has a relatively stable population, a fact that constrains the error factor.

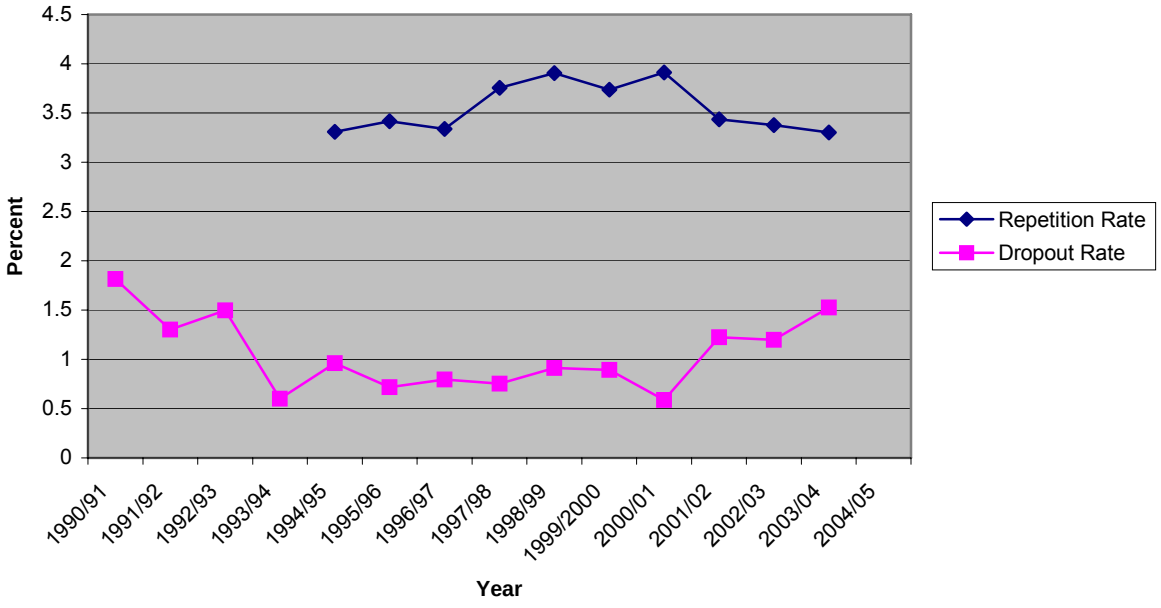
[26] The jump in gross enrollment rates for the 2003/04 school year may be a methodological artifact. Population projections had to be used for 2003/04, not the actual population statistics that were available for previous years. If the projections have a margin of error, this might explain the increase in enrollment rates. Alternatively (or in addition), in the most recent two years children may be more likely to enroll in school earlier, i.e., at age 6 rather than at age 7. The fact that the increase in enrollment rates is driven by increases in the primary, not the lower secondary, levels of education would be consistent with this explanation.

Figure 4.1. Basic Education Gross Enrollment and Graduation Rates (1990-2003)



Source: Annex D.1 and D.2

Figure 4.2. Basic Education Repetition and Dropout Rates (1990-2003)



*

Source: Annex D.2 and D.3.

BASIC EDUCATION LEARNING OUTCOMES

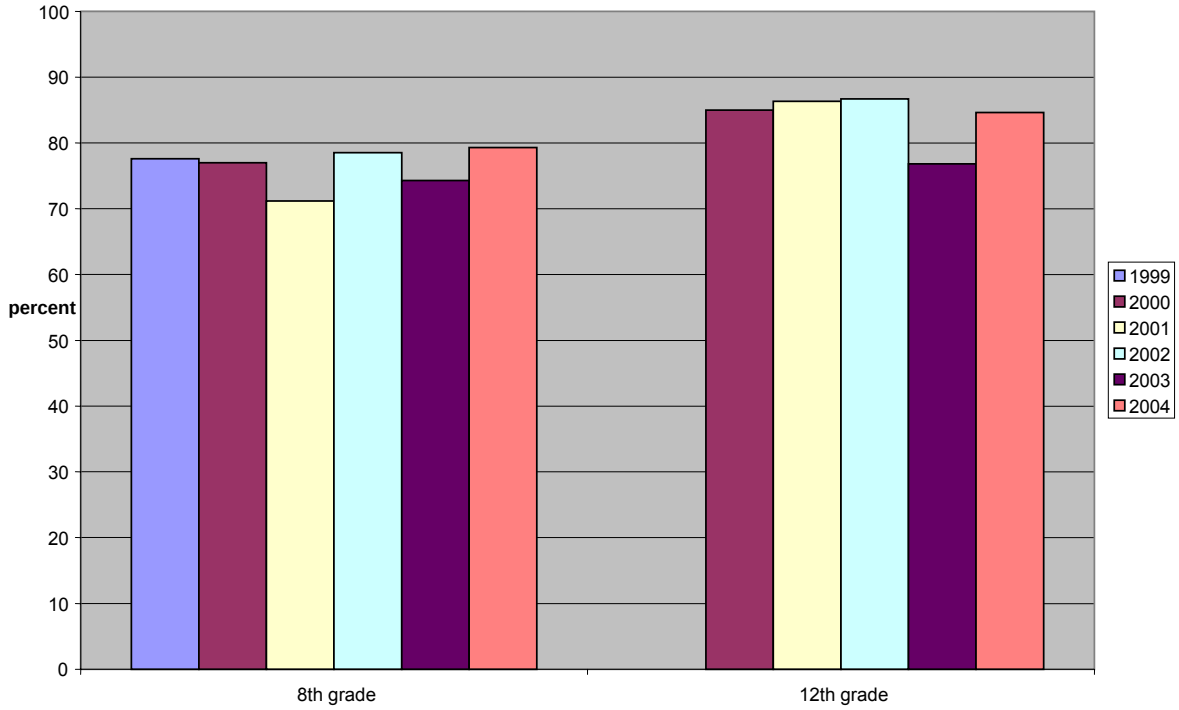
Romania administers internal 4th grade assessments and 8th and 12th selection examinations. All internal assessments and examinations are structured to measure the achievement of the curriculum's learning standards by subject and grade. Romania has also participated in several international assessments: TIMSS, PISA, and, in 2005, PIRLS.

Results for the 4th grade assessments. Unfortunately, a trend cannot be constructed for the results of this assessment because the NAES did not use the same format for reporting the results for the 1998 and 2000 4th grade assessment. In 1998 students achieved about two-thirds of the maximum scores possible in the language and mathematics segments of the 4th grade assessment. (See Annex G.6.) Performance varied by residence (urban better than rural), teacher's qualifications (qualified better than unqualified), and by years of teacher's experience (more experienced better than less experienced). Although scores did not vary much by gender, girls performed slightly better than boys in both the language and mathematics portions of the assessment.

In 2000 the NAES gave the percent of the total weighted sample in each performance quartile by characteristic, such as rural or urban residence. Although the results for language, mathematics, and science are available, only those for language are reported in Annex G.7 because the pattern of variation among the measured variables is similar for all three subjects. Again, the results by gender are broadly comparable for boys and girls, although girls did somewhat better than boys in all three subjects. The distribution of scores differs markedly by residence, that for the rural students being shifted toward the lower quartiles. The percent of urban students performing in the top quartile was double that of rural students. There are large differences by type of instruction (multi-grade versus standard). However, the interaction of rural location by type of instruction shows little difference in the distribution of scores, implying that multi-grade instruction is a proxy for rural location with its limited school and home resources. Performance in schools that differ in resources (library and computers) varies significantly, almost 30 percent more students performing in the top quartile are in schools with both a library and computers. Schools without these resources are more apt to be in rural areas and/or have students drawn predominantly from poor families with weak "voice" in the competition for school resources.

Results for the 8th and 12th grade examinations. The pass rates for the 8th and 12th grade examinations (*capacitate* and *baccalaureate*, respectively) are very respectable. Aside from occasional dips, they have remained relatively stable. Students take the 8th and 12th grade examinations in June. Those that fail can retake it in August. The data in figure 4.3 are for the June administrations of these examinations only because documents present the total pass rates (June + August pass rates) for only two of the six years for each type of examination. Annex D.5 and D.6 show the total pass rates for two years for each type of exam: 87 and 89 percent passed the *capacitate;* 95 and 97 percent, *the baccalaureate.*

Figure 4.3. Percent passing 8th and 12th grade examinations by year



Source: Romania National Assessment and Examinations Service (see Annex D.5 and D.6).
Note: Pass rates are for the June administration of the 8th and 12th grade assessments only.

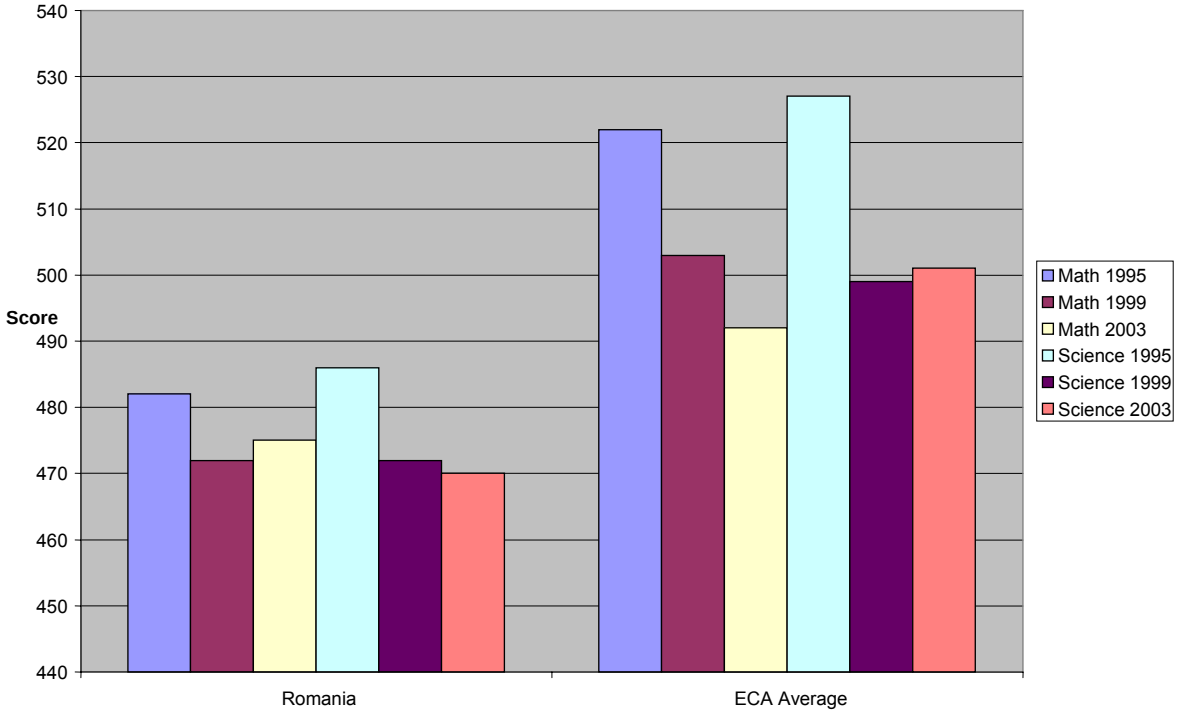
Results for TIMSS. Romania's 8th graders participated in the TIMSS in 1995 (before the reform), 1999 (the reform was being vigorously implemented), and 2003 (at the conclusion of the 2000-03 period in which the Minister of Education had tried to stop or reverse many aspects of the reform). Figure 4.4 shows that Romania's TIMSS results are virtually flat across the eight years. If anything, performance was slightly higher in the 1995 than in the subsequent administrations of TIMSS—as was the case with ECA countries on average.

It also shows that Romanian students performed significantly worse in mathematics and science for each of the three rounds than the average participant from all participating ECA countries. (See Annex G.8 for country-specific results.) Romanian analyses of the 1995 and 1999 TIMSS show that scores varied predictably with various measures of family SES. (See Annex G.9.)

It is not clear what the TIMSS series tells us about the reform. For the reform to affect learning outcomes, the student cohort taking the TIMSS has to have received the "treatment" for a sufficient period to cumulate into learning effects. Finding "no effect" can indicate that the reform had not yet started to implement or had not implemented for a period sufficient to cumulate into learning changes for the test-taking cohort. In fact, Romania's reform only started

being implemented in the 1998/99 school year. Thus, there was no reason to have expected an effect for the first two rounds of TIMSS.

Figure 4.4. TIMSS performance for Romania and ECA average by year



Source: IEA, 1997a, 1997b, 2000a, 2000b, 2004a, and 2004b.

"No effect" can also signal an unevenly or poorly implemented reform. During 2000-03 government ambivalence about some aspects of the curriculum reform could have created confusion at the school level which may have clouded the impact of the reform on learning. The problems with in-service training of teachers undercut the planned link between the new curriculum and teachers' actual classroom practices. Finally, international evidence shows that student performance often drops in the first years of a major reform simply because any big reform is inevitably "messy" as teachers and students struggle to grasp its implications.

PISA. OECD's Program for International Student Assessment (PISA) is particularly relevant to Romania's aspirations to join the EU because it measures skills valued in innovation-based economies.[27] ECA countries generally did not perform well on PISA, but Romania tested below the ECA average and well below the EU average. (See Table 4.1.) Particularly disturbing is that about 70 percent of Romania's 15 year olds performed below level 3—i.e., at levels 0, 1, or 2. Scoring at level 3 or higher is generally considered a requisite for functioning well in a modern workplace. The average EU student had more than double a Romanian's chance of performing at levels 3-5 (63 percent). In interpreting these comparisons it is important to note that Romania GDP per capita is among the lowest in the region (well below that for some Latin American

[27] PISA is administered to 15 year olds, the age at which Romanian students have just completed basic education. It measures students' understanding of key concepts, mastery of certain processes, and ability to apply knowledge and skills to solve problems in the real world.

countries), making it difficult to compete with more affluent countries. Nevertheless, since it does intend to join the European Union, it has a substantial amount of work to do if its schools are to create the human capital needed to integrate into the EU economically and that its citizens must have to avail themselves of higher wage job opportunities within the EU.

Table 4.1. Performance of ECA and EU Countries on PISA (2000)

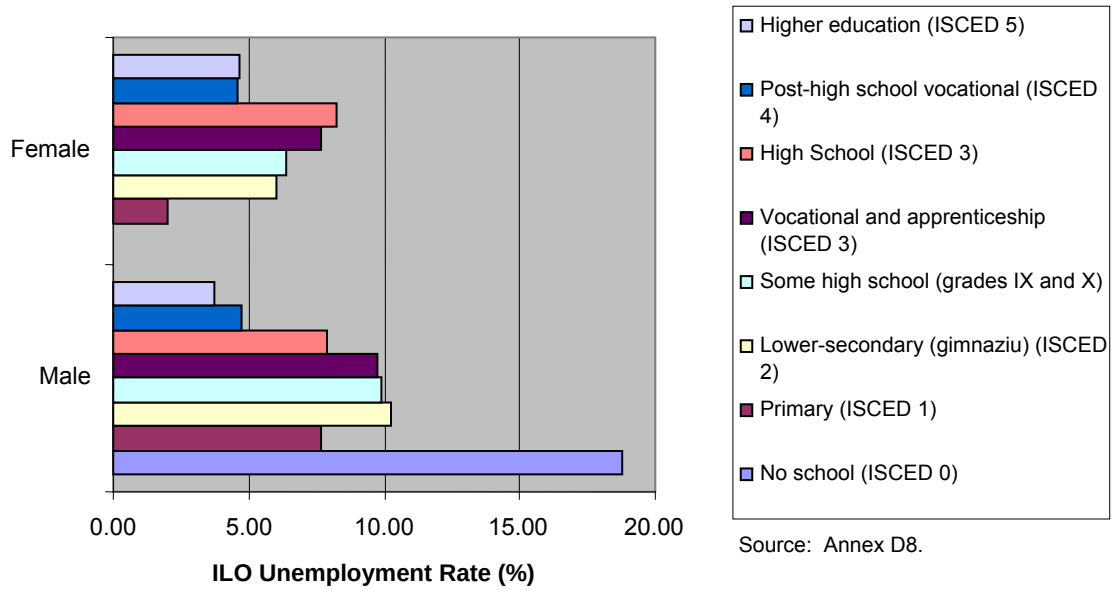
Country	Average Score	Reading Score	Mathematics Score	Science Score
Albania	369	349	381	376
Bulgaria	436	430	430	448
Czech Republic	500	492	498	511
Hungary	488	480	488	496
Latvia	460	458	463	460
Lithuania	460	458	463	460
Macedonia, Republic of	385	373	381	401
Poland	477	479	470	483
Romania	**432**	**428**	**426**	**441**
Russian Federation	467	462	478	460
ECA average	447	441	448	454
EU average	502	505	502	501
Romania as % of EU average	86.1	84.8	84.9	88.0
% of EU students at levels 3-5	Not calculated[1]	63	Not calculated[1]	Not calculated[1]
% of Romania students at levels 3-5	Not calculated[1]	30	Not calculated[1]	Not calculated[1]

Sources: OECD 2001; Romanian PISA results: National Assessment and Examinations Service.
[1]Each round of PISA focuses on a different one of the three core subjects, assessing the other two in less depth. The 2000 PISA focused on reading literacy.

Employment outcomes. Historically, unemployment rates have been the lowest among primary school graduates, which may be correlated with the low unemployment rates in rural areas (World Bank 2003). Even in 2004 the rates for primary education graduates were still relatively low, especially for women (see figure 4.5). The most vulnerable to unemployment are those in the middle of the educational attainment distribution, i.e., individuals with lower-secondary, some high school or high school, and vocational (secondary or post-secondary education). This suggests that vocational education has not been able to adapt to labor market demands and provide its graduates with the skills that would make them more employable.

However, multiple regression estimates do not yield much evidence that schooling is systematically correlated with the likelihood of unemployment, regardless of age: when controlling for gender, marital status, urban residence, and period of observation, the marginal effects of education on the probability of unemployment are small and rarely statistically significant at any reasonable level (see Annex G.10).

Figure 4.5.
The ILO Unemployment Rate and Education, by Gender: Romania, Third Quarter 2004

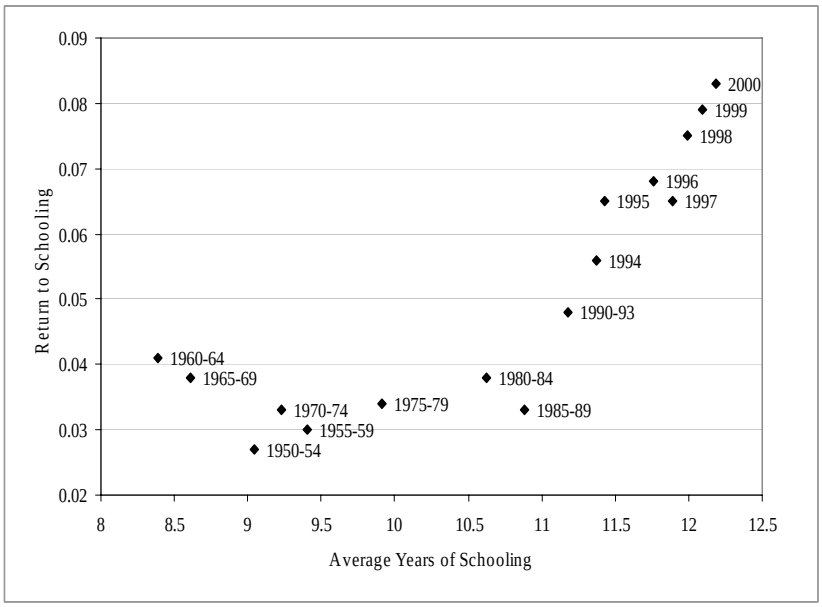


Source: Annex D8.

Figure 4.6 shows the trend in returns to an additional year of schooling across the period 1960-2000. As the economy and labor market liberalized, and as education responded—albeit with a lag—to these changes, the wage return to an additional year of education more than doubled between 1985-89 and 2000. The discrete jump in the schooling coefficient between 1985-89 and 1990-93 followed by a smaller but continuous increase thereafter suggests that liberalization and adjustment happened only gradually in Romania (Andren, Earle, and Sapatoru, 2005).

Organizational and institutional factors seem to have contributed most to this increase in the returns to an additional year of education during the transition. First, private firms, presumably operating under profit maximization strategies and harder budget constraints, are more likely to set wages equal to productivity on the margin, and are therefore less likely to provide rents to low-skilled workers than is the state sector. An employee in the private sector is likely to earn a larger return relative to the aggregate by about 0.2 percentage points by in 1994 and by around 0.7 percentage points 2000. Combined with the rising private share in total employment (see also Section 2), this sector differential may account partially for the overall growth in the aggregate return to schooling (Andren, Earle, and Sapatoru, 2005).

Figure 4.6. Average years of schooling and observed changes in the returns to an additional year of school: Romania, 1960 to 2000



Source: Andren, Earle, and Sapatoru (2005), Figure 2.2., and Annex D9.

Second, to the extent that there is a positive relationship between education and the ability to deal with disequilibria (Schultz, 1975), an indirect measure of the value of the ability to think creatively and to act entrepreneurially is the education premium for self-employment. In Romania, the estimated average return to education for non-agricultural self-employed (compared to employees) was higher in all years for the 1994-2000 period; it grew rapidly and peaked in 1998, when it reached 15.5 percent, and then declined somewhat thereafter. During this same period, the fraction of total employment accounted for by the non-agricultural self-employed expanded steadily, nearly doubling from 3.58 to 6.03 percent. Therefore, this inverted U-shape pattern is probably more likely due to initially higher rewards for individual initiative and the gradual exhaustion of the opportunities available in the transition (Andren, Earle, and Sapatoru, 2005).

The standard explanations for increasing returns to education in Western economies do not seem to apply to post-communist Romania. First, the average number of years of schooling of employees ages 15-59 increases from 11.18 in the early 1990s to 12.19 in 2000—i.e., the supply of better educated labor increased. All else equal, expanded supply should produce a drop in the price for labor. Second, there is no evidence of product demand shifts in the analyses of inter-industry variation in the estimated returns to an additional year of schooling. There also seems to be little support for the explanation of skill-biased technical change: the observed education premium has grown much more rapidly in Romania than in the West, but investments have been very scant. Third, the data do not support the hypothesis that the "quality" of education matters: estimates show that schooling acquired before 1989 did not lose value when market reforms were introduced, and education completed after 1990 was not consistently valued much higher in the labor market (Andren, Earle, and Sapatoru, 2005).

Under communism wages were compressed—i.e., wages did not reflect variations in human capital. It is possible that the trend in Figure 4.6 simply signals the predictable decompression of wages that occurs with the introduction of prices.

IMPLICATIONS OF BASIC EDUCATION OUTPUTS AND OUTCOMES FOR HOUSEHOLD DEMAND FOR EDUCATION

Household demand for basic education is high, given the evidence for enrollment rates, graduation rates, dropout rates, and learning performances on the 8th grade examination (*capacitate*). Interviews with parents and students during our school visits showed high educational expectations, with nearly all respondents expressing a desire to attend (or have their children attend) university. Most interviewees did not see any system constraints to achieving this expectation. Only a few parents in smaller rural schools indicated that their children's "lack of interest in studying" could keep them from attending university, although they expected them to attend secondary school.

However, as Annex G.4-G.5 indicate, demand is variable, with location and the costs of education often cited as enrollment barriers.[28] Being Roma has an independent and highly negative effect on demand, especially in urban areas. Using 1998 data, UNICEF et al. (2002) estimated that 12 percent of Roma children ages 7-16 dropped out of school before completing compulsory education, 18 percent never attended school, and over 80 percent of non-schooled children are Roma. Although rural areas have lower enrollment rates than urban areas, it is the characteristics of households that are more prevalent in rural areas, not rural residence itself, which depresses demand: the household is in the lowest consumption decile, it has a higher percent of agricultural workers, or its household head is self-employed.

The GoR has instituted a conditional cash transfer program to encourage families to keep their children in school. Created in 1992, the program provides a universal benefit to families for each child under the age of 18 if the child is enrolled in the education system. The level of the benefit is indexed to and adjusted regularly (World Bank, 2003), amounting in 2005 to about 250,000 lei per month (US$10). Another program designed to offset poverty and to encourage school enrollment is the "milk and roll program" that provides food to students enrolled in schools in high poverty areas.[29] There are no evaluations of the effects of these programs on school enrollment.

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[28] Compulsory education and textbooks for this level of education are free. However, parents have to buy transportation if they choose a school outside of their area or if they live in a remote village far from a school. Families pay for school supplies, uniforms, and, as students approach grade 8, private tutoring for the exit examination that determines entry into high school. Some schools, particularly in urban areas, operate a school fund from parental contributions that is then used to repair the school, help with classroom supplies, or organize special school activities.

[29] Three additional social assistance programs targeted to families with children are not conditional on school enrollment. The first is the supplementary child benefit program for families with two or more children. The average monthly payment under this program in 2004 was slightly over 350,000 ROL (US$10.50). The second is an allowance for single-parent families, with an average payment of 487,000 ROL (US$14.60) per month per family in 2004. Finally, the Ministry of Labor, Social Solidarity and Families (MoL) awards an allocation for newborn children of approximately 1.4 million ROL (US$41.90) in 2004.

As Romania integrates within the EU and an increasing share of its economic activity is higher value-added, household and workplace demand for education, especially for higher levels of achievement, can be expected to increase. Since demand for basic education access is already very high, EU accession can be expected to have the greatest effects on the household demand for secondary and tertiary education and on improvements in quality.

5. WORLD BANK'S CONTRIBUTION TO SECTORAL CHANGES (1990-2004)

This section assesses the relevance and effectiveness of Bank assistance; the efficiency and sustainability of changes supported by the Bank; and the counterfactual—would these changes have occurred in the absence of Bank support? "Bank assistance" is defined as policy dialogue, lending (investment and structural adjustment loans), and non-lending services, especially economic and sector work. Evaluating the Bank's contribution requires examining Bank-financed activities, not just in the education sector, but also in sectors that affect what the education sector can achieve, e.g., public expenditure and financial management or rural development.

RELEVANCE AND EFFICACY/IMPACT OF BANK ASSISTANCE

Relevance of Bank assistance. Table 5.1 assesses the relevance of the Bank's direct and indirect assistance to basic education. ICR assessments of the Bank's performance and statements by Romanian education experts (see discussion of counterfactual, below) speak volumes about the quality and relevance of the policy dialogue conducted by the Bank's education sector across the review period. The Bank's initial involvement was grounded in excellent sector work that even in 1991 appreciated the transformation required if educational services were to support a market economy and open political system. This initial sector work was not updated for over a decade, and the 2002 policy note was relatively limited in that it focused primarily on decentralization issues.

> *"Over a long period of project implementation that started in 1994, the Bank team was a constant partner playing a catalytic role and ensuring complex activities were undertaken at the right moment by various actors; at the same time, given the project's wide scope, the Bank team was flexible in working with priorities of different sub-sector management teams, trying to maximize the benefit of potential focus placed on one component or another one at different points in time under different political circumstances. At the same time a lot of support was provided for responding to immediate needs such as the rural education pilot introduced as a new sub-component." (ICR for ERP, 2002)*

Table 5.1. Relevance of Bank Assistance to Romania's Basic Education System

SECTOR/THEME	FORM OF ASSISTANCE		
	Policy Dialogue	Lending	Non-Lending
Education	Sustained	Education Reform (approved 4/94; School Rehabilitation (approved 7/97); Rural Education (approved 5/03)	1991 Sector Work 2002 Education Policy Note
Poverty Assessment	Unknown	2001 CAS pursued several lending and non-lending initiatives under the CAS	1997 Poverty and Social Policy 2003: Poverty Assessment

		pillar of "Targeted Poverty Interventions"	
Public administration	Unknown	PAL I (approved 9/04)	1998 PER, Part II, Civil Service Reform
Public expenditure and financial management	Unknown	PAL I	1998 PER, Part I, Public Sector Financial Management: did not assess expenditure issues in education 2002 PER: did not assess expenditure issues in education except for 3 pages in decentralization chapter. 2005-06 PER: education now scheduled to be excluded
Decentralization	Unknown	PAL I	1999 Local Social Services Delivery Study (published 2002) 2002 PER 2002 Education Policy Note
Labor Markets	Unknown	PSAL II (approved 9/02); Social Sector Development project (approved 6/01); PAL I	2004 CEM, Restructuring for EU Integration: almost no linkage between education learning outcomes, skill implications of EU accession, and intermediation of labor markets.
Rural development	Unknown	Significant number of projects	2004 CEM, Restructuring for EU Integration
CAS			
1993	Had a module on human resources, specifically addressing basic education reform issues. Included lending for Education Reform Project and Higher Education Project.		
1997	Fighting poverty and human capital a pillar. Included lending for School Rehabilitation Project.		
2001	Education entered CAS as part of pillar on targeted poverty interventions under revitalizing the economy in rural areas. Included lending for Rural Education Project.		
2005	In draft. Will probably include lending for education targeted on Roma population.		

Source: Annex H and authors.

Lending for basic education was highly relevant to the needs of and GoR's priorities for the sector, and the three projects undertaken during the review period formed a tightly coherent attack on the sector's problems. Staff of the Institute of Educational Sciences (IES) approached the Bank about supporting a reform in 1992, resulting in the Education Reform Project in 1994. The 1997 School Rehabilitation Project de facto extended the ERP, focusing on school infrastructure. In 1999 the Minister of the MER asked the Bank for a rural education project. The performance of rural schools was lagging that of urban ones, and rural poverty was soaring. In consultation with the client and Bank management, the Bank's education team reallocated remaining ERP funds to an emergency pilot focused on rural schools in eight counties. In 2003 the Bank supported a Rural Education Project that was focused entirely on rural education, basing it on the results of this pilot.

> *"The reform is truly comprehensive; it all other aspects of the educational enterprise. The reform is both ambitious and touches on curriculum, teachers, textbooks, admission policies, financing, staff policies and nearly challenging, but grounded in the recognition that such reform is necessary for Romania to face the challenges of the transition to a market economy and a democratic society."* (OECD *Education Review Report,* 1999)

The relevance of the Bank's work in other sectors that affect education is another story. Every CAS since 1993 has supported education, but the education sector has needed inter-

sectoral attention that thus far has failed to materialize—e.g., public administration, public expenditure and financial management, decentralization, labor markets, and rural development. The series of programmatic adjustment loans (I, II, and III), starting with PAL I in September 2004, may help to redress this failure. The PAL addresses institutional and financial (including legal and regulatory) issues common across the sectors. For example, a PAL I condition is that the GoR adopt amendments to the Education Law and Teachers Status Law, thus enabling the piloting of nation-wide per capita financing for pre-university education. At the same time, PRSCs and PALs have generally failed to realize one of their objectives—to frame a cross-sectoral attack on a country's problems. Usually multiple sectors are included under a PRSC or PAL umbrella. However, instead of working together cross-sectorally, each tends to plow its particular furrow.

Aside from the PAL, the relevance of inter-sectoral work to education heretofore is as follows.

- Poverty assessments are satisfactory. They estimate the effects of different levels of education on poverty probabilities, identify where poverty is concentrated, and estimate interactions effects of household or individual characteristics and education on poverty.

- Teachers are not civil servants and are governed by a Teachers Statute. However, although civil service reform is not directly relevant to education, it can establish de facto standards for the human resource management of public sector employees that are outside of the civil service. The sector work on civil service reform is solid, and in 1999 Parliament passed a law that introduced desirable civil service features such as a National Agency for Civil Servants and rules such as competitive selection. However, the implementation of the spirit of the 1999 law has been slow and ragged.

- Surprisingly, the sector has never been included in a public expenditure review and is at risk for being excluded from the one scheduled for end-FY05 or FY06, despite pleas by the Bank's education team for help. The MER is struggling ineffectually with the sector's fiscal issues. As noted in section 4, the MER does not have the capacity to determine if there is a business case for increasing allocations to the sector by modeling the fiscal adequacy and sustainability of the sector's financing under alternative scenarios. Thus, neither the GoR nor the Bank has grounds for evaluating inter-sectoral allocations as they affect the education sector. Although the MER has struggled to deal with the fiscal implications of decentralization, its response has lacked coherence. It is poorly positioned to participate in any future medium term expenditure (or budget) framework exercise.

- The Bank has contributed solid economic and sector work in support of the decentralization framework, especially its fiscal dimensions. However, in its Romania Country Lending Enhancement Review, QAG noted that the Bank had supported the GoR's decentralization agenda "without helping to provide municipalities with the technical skills and funds to manage the responsibilities transferred (unfunded mandates). This affects sectors such as education and health, and a few other public service responsibilities that were transferred to the municipalities….[T]he Bank should have paid—and should in the future pay—more attention to governance and fiscal issues at the

municipal level to ensure that decentralization was and is successful" (World Bank 2004b).

- The Bank's ESW on labor markets, especially in the CEM (2004), acknowledges the need to "increase investment in human capital and address the skills mismatch gap." However, no analysis has been conducted of the skills and knowledge being produced by Romania's education and training system relative to the skill requirements associated with managing the competitive pressures that will stem from EU accession.[30]

- The Rural Education Project struggled with the lack of a clear Bank strategy on rural development. As QAG noted in its Country Lending Review, "It does not appear that the country team is organized around a cluster or theme devoted to the vision and strategy for the rural economy and the welfare of rural households, including the role of the state in local service delivery and a multi-regional perspectives" (World Bank 2004b).

Efficacy/impact of Bank assistance. Table 5.2 summarizes the in-depth Bank evaluations of the Bank's lending in education. Relative to the projects' objectives, the Bank's education assistance performed well except for teacher training, a problem that reflected more on the Borrower's than on the Bank's performance. These evaluations point to development effectiveness in Bank lending. The ratings are very solid for outcomes, institutional development, and Bank performance. (See the discussion of sustainability, below.) IEG ratings are consistent with or higher than those assigned by the implementation completion reports.

Table 5.2. Summary of Evaluations of World Bank Education Lending in Romania[1]

Activity	Implementation Completion Report	IEG Evaluation Summary	IEG Project Performance Assessment Report	QAG Country Enhancement Lending Assessm't
1994 Education Reform Project	Outcome: S Sustainability: L Institutional Development: H Bank performance: S	Outcome: S Sustainability: L Institutional Development: H Bank performance: S	Outcome: S Sustainability: L Institutional Development: H Bank performnce: HS	
1997 School Rehab Project	Outcome: HS Sustainability: L Institutional Development: SU Bank performance: S	Outcome: HS Sustainability: L Institutional Development: SU Bank performance: S	None	
2003 Rural Educ Project;	REP does not close until September 09	REP does not close until September 09	REP does not close until September 09	QAE and QSA: S
Roma project	In preparation			

[1] ***Scales:*** HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, H=High, SU=Substantial, M=Modest, N=Negligible)

[30] EU accession, especially the Copenhagen criterion, requires the candidate country "to have…the capacity to cope with the competitive pressure and market forces within the Union."

In general, the Bank significantly under-estimated the magnitude of conceptual changes ("habits of thought") that ECA countries would have to undergo if they were to establish market economies and democracies. The design of the ERP unfortunately did not include a sustained public relations campaign around its objectives, which might have made them more palatable to a wide range of stakeholders. The concepts behind the reform were alien to players that were conditioned to a highly centralized, command and control system. Such a campaign could have started to prepare different players for changes that were coming and the reasons for them. Clearly, such a campaign could only have been waged with the acquiescence, if not the active support, of the GoR and MER, and even passive support waxed and waned. However, had the ERP launched a strategic campaign at the start of the project, the idea of such campaigns might have become embedded in MER's operations.

EFFICIENCY AND SUSTAINABILITY OF CHANGES SUPPORTED BY THE BANK

Efficiency. There are no cost-effectiveness or cost-benefit analyses that can be brought to bear on this question. However, the value-for-money obtained under ERP, SRP, and, thus far, REP seems impressive.

The ERP had budgeted about 55 percent of the total loan for textbooks. Careful management of the textbook procurement process let the PCU save about 25 percent of the unit cost for 23.6 million textbooks procured for grades 1-8. This reduced the textbook cost from an estimated $28 million to $18.54 million, freeing up funds that could be reallocated for the rural education pilot.[31] The teacher training component is the only ERP component with questionable efficiency. As noted in section 4, because the GoR failed to fulfill its commitment to finance teacher training, available Bank financing had to be used to conduct emergency two day orientation (not training) of teachers, using the cheaper but flawed cascade model.

In the SRP 84 percent of the loan was allocated to school rehabilitation. Because the Central Project Management unit exercised effective quality and cost control, SRP was able to reallocate loan funds to increase the number of schools rehabilitated from 900 to 1200.

Sustainability. Section 3 evaluates sustainability. As noted, the sustainability of some of the reforms achieved under the ERP became questionable under Minister in power during 2000-03. Section 6 on lessons learned points out that there are legal actions that the Bank can take to help sustain reforms, and a number of Romanians interviewed argued forcefully that the Bank should pursue such a course. The question has to be raised about the role of the Bank after projects close. In one sense, the responsibility for sustaining project benefits is now Government's. At the same time, if a government reneges on macro-economic reforms agreed upon with the IMF, the latter takes strong action.

[31] In addition, these efficiencies saved the GoR $9.8 million over the $19.1 million planned as the Government share of textbook costs.

COUNTERFACTUAL: DID THE BANK MAKE A DIFFERENCE?

Romania's basic education would not have made the progress achieved in the last 15 years without the consistent support of the World Bank. Romanian counterparts and the World Bank's education team left no doubt about this point.

"Without the World Bank project, Romania would not have had the impetus for change."
"The World Bank contribution to reform was very high. Nothing could have been done without it."
"Financing was significant, but, more importantly, it brought about a change in mentality at the national level by providing an opportunity to see and learn about new things, the opening of doors, a new way of thinking about things. Change was desired by Romanians, but we could not have made it happen without World Bank support."
"Technical Assistance is not really part of the second school rehabilitation project (Rehab II). The European Bank of Investment is closer to a commercial Bank. Rehab II would not have been created without the World Bank's Rehab I that generated all the manuals, models and construction methods. Following Rehab I, the GoR only needed financing. It no longer needed TA to manage school construction and rehabilitation".
"Other financing institutions, such as the European Bank of Investment and EBRD, focus more on financing and the effectiveness of loan. The World Bank is better on human development"
"Before the transition, education was too tied up with politics. The World Bank helped to professionalize/ de-politicize education decision-making—though we still have a long way to go." (Case Study Interviews)

The quotes cited to the side and below attest to the value of the Bank's support. However, one particular interview revealed the basis for these shared views. The interviewee saw the World Bank as critical to education reform in Romania, but stressed that it was not just the money that was important. "If we learned anything, we learned it from the World Bank teams. These teams helped the country understand the concepts behind the project, helped us design the project, helped us implement the project. This is a major difference between the Bank and other donors. Other donors usually send consultants who do their work and then leave. The World Bank, on the other hand, is our partner—there is a team between the World Bank staff and Romanians. The Bank builds groups of Romanian specialists that can contribute to activities other than World Bank activities. Romania will need the Bank's support even after Romania joins the EU. You can't find the World Bank's expertise in the EU. World Bank staff is highly committed and fine specialists. They are well-organized—and Romanians need organization. They create what amounts to a professional network with their Romanian counterparts. There are only good lessons from the Bank" (Case Study Interview).

Romania's drive to join the EU raises the question of whether the Bank will continue to have a role in education in Romania. The QAG Country Lending Enhancement Review (World Bank 2004b) concluded that there is a valid role for the Bank in the coming years, especially in education, public health, and social protection. "After accession the social sectors—broadly defined—may be the most important niche for Bank involvement, as the substantial EU resources will be focused on other sectors."

6. LESSONS LEARNED FROM BANK ASSISTANCE TO BASIC EDUCATION

Several lessons emerged from the 15 years of a Romanian-World Bank partnership focused on basic education.

BALANCING FIRMNESS WITH FLEXIBILITY IN PROJECT NEGOTIATIONS

Several interviewees commented that the Bank should have been firmer at the ERP negotiations. The Bank and GoR agreed to significantly reduce the in-service teacher training component, conditional on the GoR's commitment to finance in-service conduct training itself. In fact, much of the Government-financed training was never completed, partly because of fiscal crises. The small ERP budget of US$ 5 million for teacher training could finance only two-day, "quick and dirty" sessions using a cascade model, a model established internationally as bad practice for the training requirements under ERP. On the basis of this lesson, the Bank held firm when the GoR tried to eliminate the school grants component of the REP during negotiations. This component is currently under implementation with substantial positive feedback from local schools.

COMPREHENSIVENESS CAN ADVANCE IMPLEMENTATION

The Bank is usually wary of comprehensive project designs. Their inherent complexity often overburdens governments with weak capacities, resulting frequently fatal implementation problems. However, the ICR for the ERP argues persuasively that it was ERP's very comprehensiveness that allowed it to run successfully for eight years through four Ministers and eight Under-Secretaries for Pre-Tertiary Education. Its comprehensive design provided political flexibility. Given ERP's diverse array of project activities, each incoming politician could identify with a particular subcomponent. In other words, coherent comprehensiveness can let Bank projects adapt to the realities of political instability and frequent ministry turnover.

THE BANK MAY HAVE A ROLE IN SUSTAINING PROJECT ACHIEVEMENTS

The Bank's role in sustaining the accomplishments of closed projects is not clear. What are the Bank's legal capacities and responsibilities when a new government backs away from reforms and achievements of a closed project? As discussed, in 2001 MER reversed some curriculum and textbook reforms, creating uncertainty during 2002-2003. Many of teachers, principals, ministry staff, and members of the greater education community (NGOs and semi-autonomous agencies) interviewed felt that the active presence of the Bank had contributed a needed counterweight to such policy reversals. This has been and could continue to be the result of the Bank's ongoing dialogue with Government, other key actors, and the donor and NGO communities, helping to assure the continuity of reform efforts where project accomplishments are threatened.

CREATING NEW PARTNERS AMONG NGOS AND SEMI-AUTONOMOUS AGENCIES BUILDS CAPACITY THAT TENDS TO BE SUSTAINED

One of the significant and positive efforts during this period was the extensive collaboration and support network that the Bank support facilitated with groups outside of the MER. With high rates of turnover within the MER, the Bank became a source of institutional memory for reform. However, Bank staff understood they could not carry the banner of reform alone. As highlighted in the project documents for the ERP, Romania needed additional technical capacity both within and outside of the Ministry in order to guarantee continuity. To this end, the Bank was very successful at the national level in encouraging the development of both semi-autonomous agencies related to the Ministry and independent NGOs. These agencies, including the National Curriculum Council, National Assessment and Examinations Service, and the National Center for Teacher Training served as allies for sustainability in a tumultuous political environment. In developing partnerships, the Bank was also successful in looking outside the MER and supporting the creation or strengthening of a professional development network within education. Examples include Center Education 2000+ (CEDU2000+) and the Institute for Educational Sciences. Support for these partners went beyond invitations to conferences and workshops. Some of the key allies for reform received funding to support the development of pilot programs and evaluations and participated in practical "training with production" technical assistance activities.[32] By encouraging the efforts of this diverse group of champions for change, the World Bank helped to increase sustainability of Bank-funded initiatives.

GOR WILL NEED TO EXERT MORE DONOR COORDINATION, ESPECIALLY FOR ROMA PROJECTS

Although the World Bank is one of the principal donors in education in Romania, other donors play a complementary role. The European Commission (EC) is a significant education donor through its PHARE project: from 1995 to date, this project supported initiatives in vocational education and small school-based projects for at-risk populations (up to 278.5 million euros in 2002). NGO and other bi-lateral efforts in education, distributed across numerous projects in small communities, typically focus on disadvantaged groups, especially the Roma. A 2002 report records some 110 education intervention programs targeting the Roma from 1997-2001 (UNICEF et al, 2002). Financiers include bi-lateral donors and foundations from the Netherlands, France, Sweden, Canada, and NGOs such as the Open Society Foundation, Caritas, and Save the Children. The Bank's IEG report on the Implementation of the Comprehensive Development Framework in Romania (World Bank, 2004d) found that formal coordination of donor efforts (typically run through various ministries) had been minimal, except efforts by the World Bank and EC to avoid duplication. Small donors typically operate independently, or seek to leverage their more modest contributions by using them to further large-donor objectives. Examples of the latter include USAID and DFID which provide design and/or technical assistance funds to some of the World Bank's more recent initiatives. If the GoR wishes to exert greater control over donor activities in order to eliminate overlap and improve targeting, they

[32] As highlighted in the ERP ICR, "the principle of "training-with-production" is a cost-effective form of TA that builds professional skills. This principle entails: (i) very careful planning of all TA activities; (ii) elaborated mix and match of the theoretical aspects with concrete actions: well targeted training programs/seminars covering specific theoretical knowledge followed by immediate application of such knowledge . . .; (iii) very carefully selected study tours focused on building specific abilities and capacity of specific team members. Study tours and brief non-specific study visits are expensive and non-productive, unless there is intensive follow-up and application of lessons learned. Longer-term study attachments *directly related to the participant's future tasks* have more lasting value." (World Bank, 2003).

should do so through an aid coordination unit that includes representatives from each ministry.[33] Additional collaborative effort will certainly be needed for the new cross-sectoral project on the Roma that is under development and that builds on lessons learned from the smaller NGO projects.

BUILDING SUPPORT FOR REFORM IS ESPECIALLY NEEDED FOR PROJECTS WITH LONG TIME FRAMES OR THAT ARE IMPLEMENTED UNDER DECENTRALIZATION

Public information campaigns and consultative processes build support for education reform efforts with long time frames, especially ones implemented under decentralization. Under ERP the teacher training and curriculum components did not have adequate stakeholder input, adaptation and experimentation. The MER adopted the curriculum via a ministerial edict, and non-compliance was punishable by fine. Having learned this lesson, Bank efforts under the REP and its rural pilot under ERP have included collaboration and dissemination of program activities to the school and local level. Building stakeholder participation and buy-in can also increase the chances of project sustainability: beneficiaries both knowledgeable of and satisfied with project results can provide a counterbalance to politicians that want to eliminate successful programs.

THE MESO-LEVEL IS KEY TO SUCCESSFUL EDUCATION REFORM

The meso-level of education management (regional and local offices) is a key player in education reform, although World Bank projects frequently neglect it. In Romania's case the School Inspectorates act mostly as an arm of the MER, conducting inspections of the school (about once a year) and individual teachers (end of probationary period and "teacher-grade" examinations). As such, they are well positioned to assist the Ministry in providing support to schools. However, in numerous interviews school staff described school inspectorate visits as bureaucratic and non-productive. Inspectors tend to focus on ensuring document compliance and transmitting directives from the MER rather than assisting schools in improving learning outcomes. School staff members want support for reform efforts, including assistance with school improvement, and greater coordination of teacher training activities in accordance with their needs. Designs of future World Bank projects need to mobilize the positive potential of such agencies.

7. CONCLUSIONS

DEVELOPMENT EFFECTIVENESS OF BANK SUPPORT TO ROMANIA'S BASIC EDUCATION SYSTEM

The Bank's education team has had a significant and positive effect on Romania's basic education system across the 15 years reviewed (see section 5). The overall Bank gets a lower grade. Heretofore, the Bank's management has not solved the admittedly difficult "silo" problem that undermines the cross-sectoral collaboration needed in order to rationalize reforms of Romania's education system.

[33] In 2002 UNDP and the World Bank agreed to provide funding for such a unit in the Ministry of Public Finance (World Bank, n.d.).

The failure to include the sector in any completed or planned public expenditure reviews is inexplicable. The MER is struggling ineffectually with the sector's fiscal issues, and neither the GoR nor the Bank has grounds for evaluating inter-sectoral allocations as they affect the education sector. The sector needs help with its fiscal framework for decentralization, but decisions here have to be aligned with a larger decision framework. The lack of a country team/GoR agreement on a rural strategy undercuts efforts to support rural education and the Roma that live in rural areas. The work on EU integration has done little to pursue the human capital demands of Romania's integration into the Union—e.g., rural-urban gaps in years and quality of education or the implications of the PISA results.

IMPROVING THE EFFECTIVENESS OF FUTURE BANK SUPPORT EFFORTS

The cross-sectoral problem is not unique to the education sector or to Romania. QAG and IEG have conducted a number of country performance assessments that revealed widespread challenges in making cross-sectoral programming work well. The concept of a Bank "country team" was expected to create cross-sectoral collaboration around agreed-upon problems that the country needed to solve. However, it is very difficult to make this concept work as intended.

Counterparts argue that even after Romania joins the EU, the World Bank has a role in education, a view also voiced by the Bank's QAG Country Lending Enhancement Review (World Bank 2004b). Romania has skill level problems to solve to enable its entry into the Union. It cannot afford to focus solely on the *Acquis*, ignoring factors outside of the *Acquis* that directly affect its chances of solving problems within the *Acquis*. Education is one of those factors. On the other hand, if the Bank's management for Romania chooses to fill the vacuum created by the *Acquis,* the Bank has problems of inter-sectoral collaboration to solve if it is to help the country address challenges in the education sector.

The current Minister of MER is sympathetic to bringing the threatened reforms back up to speed. To support the reform's renewal, a sensible first step for the Bank to take would be to help the MER design and implement a sustained public relations campaign that persuasively links the need for basic education reform to Romanian citizens' ability to flourish within the EU.

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ANNEXES AND STATISTICAL TABLES

ANNEX A: TIMELINE OF EVENTS AND DEVELOPMENT ASSISTANCE

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
1989 Dec 25	End of Communist Regime through Revolution				
1990	First Post-Revolutionary democratic elections won by the National Salvation Front Ion Iliescu elected president New government tackles reform program	Establishment of Institute for Educational Sciences (IES);re-opened University departments of Education, Psychology, Sociology	Compulsory education reduced from 10 to 8 years Curriculum modified to replace communist ideology	Introduction of external support	
1991	Adoption of first democratic constitution First Law on Syndicates	Teachers unions established	Technical education introduced in grades 1-8 Reduction of school day from 6 to 5 days	Educational alternatives supported with foreign funds (Freinet, Waldorf, Montessori)	World Bank establishes mission. First exploratory missions in education
1992	Bucharest hosts international conference of European Ministries of Education	Beginning of reform process in Ministry	Minority language education permitted in school (Hungarian, Slovak, Ukrainian, German, Serb)		
1993	Romania became a member of the Council of Europe	Ministry of Education issues White Paper on education reform. 3.2 of GDP allocated to education	.		
1994			A free-market system for teaching aids was set-up First participation in TIMSS		Education Reform Project (ERP) (US$55m) submitted to WB Board

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
1995	Romania submitted its formal application for membership of the EU on 22nd June	New Education Act The Statute of Teaching Staff was issued Textbook Approval Board established	New subjects introduced in curriculum: science and civic education New curriculum for grade one written and approved. Descentralization process of education finance began 189 textbook titles approved for primary and lower secondary education level	Major reform program began, financed by the EU/Phare to restructure vocational education –PHARE –VET program	ERP begins implementation
1996	General Elections won by Democratic Convention sweeps aside former communists Emil Constantinescu elected president	Minister Petrescu begins term Management and Finance component was set-up	New curriculum for grade two written and approved Technical specifications and national bidding process for printing of new textbooks with support of WB New textbooks for all subjects in grades one through seven published		

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
1997	Economic reform program announced *Securitate* files opened	Education law modified National Assessment and Examination Service Established 3.7 of GDP allocated to education	Curriculum Framework for pre-university education approved (school-based curriculum set at 30%) New approved curricula for grades 1-9 New system of grading introduced at primary level (qualitative evaluation rather than number grades) School year restructured into two semesters	EU develops PHARE project for support of Vocational Education	CAS School Rehabilitation Project submitted to Board (US$103m)
1998		Minister Marga begins term	New curriculum for grade four approved Important policy paper published :"National Curriculum Reference Framework for compulsory education" National Teacher Training program commenced 4th grade national assessment		

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
1999		National Agency for Education Management, National Council for Curriculum, National Council for Textbooks and National Council for Management and Financing created Education Act amended to extend compulsory from 8 to 9 years from school year 2003/2004	Capacitate introduced (8th grade examination) National curriculum for primary and secondary education implemented School –based curriculum introduced Second participation in TIMSS 4th grade national assessment		School Rehabilitation Project begins implementation
2000	General Elections, won by Social Democrat Party; Ion Iliescu retakes presidency Official start of EU membership negociations Romania closes first chapter of process for EU integration	Minister Andronescu begins term National Council for the Development of Rural Education established	Participation in PISA	OECD published “Report on Romania: Review of national education policies”	

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
2001	New chapters of negotiations with EU were opened First economic growth after 1989 Law aimed at returning to its original owners property nationalised during communist regime approved by Parliament	MER started implementing a school consolidation and busing program National Center for Teacher Training set –up 3.8 of GDP allocated to education Education is mainly financed from the *judets* and local budgets	Curriculum Frameworks revised: school-based curriculum reduced from 30 to 5 percent Subject curricula revised (Math, History, etc.) 397 textbook titles approved for grades 1-8	Impact Study on Curriculum Reform published by Center Education 2000+ and MER	CAS
2002	Romania formally invited to join NATO	The Government Program "Roll and milk" for primary students started The Board for Textbook Approval and Distribution was set up 4.2 of GDP allocated to education		EU PHARE project introduced for disadvantaged populations (including Roma)	

Year	National Event	Sectorial Event	Primary/Lower Secondary Education Development	Bi/Multilateral Agency or NGO Event	World Bank Event
2003	Referendum on a new constitution meant to bring Romania into line with members of the EU	Minister Athanasiu begins term New Education Act Third participation in TIMSS	New alternative textbooks introduced in all grades Nine years of compulsory education Private education statistics: 132 pres-schools. 35 primary schools and 11 lower secondary schools		Rural Education Project (US$68m) submitted to board
2004	General Elections, won by coalition of National Liberal Party and Democratic Party Traian Basescu elected president Negociations on EU accession chapters were completed Romania became full member of NATO		Ten years of compulsory education	EU Progress Report establishes that Romania is a functional market economy	Implementation of Rural Education Project
2005-Jan-April	Romania signs EU Accession Treaty -25 April, putting it on course to join in 2007 provided reforms are implemented in time	Minister Miclea begins term	First participation in PIRLS 4th grade national assessment		

Source: Authors.

ANNEX B. INVENTORY OF WORLD BANK DEVELOPMENT ASSISTANCE

B.1. WORLD BANK

Portfolio of World Bank assistance: 1990 to present (dates and dollar amounts where relevant)			
	Education Sector	**Other sector**	**Conditionalities**
Lending	▪ Education Reform Project (1994, 50m) ▪ School Rehabilitation Project (1997, 70m) ▪ Rural Education Project (2003, 60m)	Social Development Fund I (YEAR, XXm)	
Economic & Sector Wk	▪ Trends in Education Access and Financing during the Transition in Central and Eastern Europe (1997) ▪ Secondary Education and Training (2001) ▪ Reshaping Education for an Open Society in Romania: 1990-2000: Case Studies in Large Scale Education Reform (2003)	▪ Poverty and Social Policy (1997) ▪ Public Expenditure Review (1997) ▪ Building Institutions for Public Expenditure management: Reforms, Efficiency and Equity (2002) ▪ Poverty Assessment (2003) ▪ Local Social Services Delivery Study (2002)	
Policy Dialogue	▪ Trends in Education Access and Financing during the Transition in Central and Eastern Europe (1997) ▪ Secondary Education and Training (2001)	▪ CAS 1997 and 2001 ▪ Accelerating the Transition (1991) ▪ The Challenge of Transition (1991) ▪ Decentralizing Education in Transition Societies: Case Studies from Central and Eastern Europe (2001) ▪ Restructuring for EU Integration (2004)	
Capacity Building			

Source: Authors.

B.2. OTHER MAJOR DEVELOPMENT AGENCIES

Inventory of Non-Bank External Assistance: 1990 to present (dates and dollar amounts where relevant)			
	European Union	Education 2000+ (Soros/Open Society Foundation)	Other Multi and Bi-laterals
Lending/Grants	Pre-accession EU program (~700 m euros per year): • PHARE (Vocational Education-VET) (1995-date) • ISPA (Environment and Transport, 2000-2006) • SAPARD (Agriculture and Rural Devel, 2000-2006)	• Equal Chances (2001) • Together for a Better Community (2002) • Career Dream (2001)	The Netherlands, CARITAS, UNCIEF, Council of Europe, Canadian Assistance, Save the Children, UNDP, USAID, SON Second Chance: Various Roma and other Disadvantaged Population Projects
Economic & Sector Wk		• Impact Study on Curriculum Reform	
Policy Dialogue		• Open Guidance and Advisory Services • Development and Implementation of a Regional Mechanism for Encouraging Employment in region V-West • Human Resources Development in General High School in Romania for Adjusting the Educational Supply to labor market Needs	• OECD: Report on Romania: Review of National Education Policies • UNICEF, MER, IES et al.: The Participation to Education of the Roma Children
Capacity Building		• Continuous Profession al Development for Teachers; Institutional Development for Schools • Summer Schools of EDU2000+ • Critical Thinking and Active Learning	• British Council: Textbook Evaluation • Netherlands (CITO): Assessment

Source: Authors.

ANNEX TABLE C. TRENDS IN ROMANIA'S PUBLIC EXPENDITURES IN EDUCATION 1990-2003

	Indicators	1990-1995 Average	1996	1997	1998	1999	2000	2001	2002	2003	Data Sources
	GDP (bln ROL)										Romanian Statistical Yearbook, 2003, for 1990-2002 figures (numbers from 1990 to 1998 follow the EAS 1979 methodology, while figures from 1998 to 2002 follow the ESA 1995 methodology). WIIW (Vienna Institute for International Economic Studies) Handbook of Statistics, 2004, for 2003 figure
1	**GDP (current prices)**	25,172.57	108,919.60	252,925.70	371,193.80	545,730.20	803,773.10	1,167,687.00	1,512,616.80	1,890,778.30	
	State Budget (bln ROL)										
2	**Total State Budget Government Expenditure (TSBGE) (rows 2a+2b+2c+2d+2e), of which:**	5,565.47	23,732.00	52,896.59	77,616.58	106,886.66	149,167.90	184,012.20	226,823.40	281,450.60	National Institute for Statistics, Romanian Statistical Yearbook, 1991 through 2003, for 1991-2002 figures. Ministry of Public Finance for 2003 figure (http://www.mfinante.ro/buletin/arhiva2003/12/rom20.htm)
2a	Recurrent (=row 2a1 + row 2a2)	na	na	na	na	na	48,988.00	46,666.80	60,706.00	81,084.90	
2a1	Salaries & Wages	na	na	na	na	na	35,482.90	27,568.00	33,903.20	42,587.80	
2a2	Goods & Services	na	na	na	na	na	13,505.10	19,098.80	26,802.80	38,497.10	
2b	Investment	na	na	na	na	na	6,604.60	10,023.10	13,095.50	25,913.60	Ministry of Public Financ
2c	Subsides	na	na	na	na	na	35.805.50	56,041.30	61,463.50	17,896.20	
2d	Transfers	na	na	na	na	na	4,985.10	9,497.80	15,734.90	88,423.40	
2e	Other Expenditures	na	na	na	na	na	52,784.70	61,783.20	75,823.50	68,132.50	
	of which:										
3	**Total State Budget Education Expenditure (TSBEE) (rows 3a+3b+3c+3d+3e), of which:**	744.08	3,280.88	7,156.60	10,801.64	13,996.16	20,173.44	9,884.18	12,632.69	15,560.50	National Institute for Statistics, Romanian Statistical Yearbook, 1991 though 2003
3a	Recurrent (=row 3a1 + row 3a2)	na	na	na	na	na	15,697.50	2,870.10	3,505.60	4,474.90	
3a1	Salaries & Wages	na	na	na	na	na	14,503.60	1,555.50	1,982.90	2,367.90	
3a2	Goods & Services	na	na	na	na	na	1,193.90	1,314.60	1,522.70	2,107.00	
3b	Investment	na	na	na	na	na	468.00	618.50	797.80	921.40	Ministry of Public Finance
3c	Subsides	na	na	na	na	na	3,626.90	5,098.80	6,126.10	7,697.90	
3d	Transfers	na	na	na	na	na	277.10	1,130.90	1,827.00	1,976.20	
3e	Other Expenditures	na	na	na	na	na	103.90	165.80	376.00	490.10	
	of which:										
4	**State Budget Basic Education Expenditure (SBBEE)**	na	na	na	na	na	7,155	81.80	133.50	180.00	Ministry of Public Finance

ANNEX TABLE C (CONTINUED). TRENDS IN ROMANIA'S PUBLIC EXPENDITURES IN EDUCATION 1990-2003

	Indicators	1990-1995 Average	1996	1997	1998	1999	2000	2001	2002	2003	Data Sources
	Total Expenditures (bln ROL)										
10	**Total Government Expenditures (TGE) (= row 2+ row 5)**	6,566.13	28,687.18	63,267.07	90,998.04	128,485.94	182,384.56	254,687.62	319,511.79	409,735.00	Author's calculations
11	**Total Education Expenditure (TEE) (= row 3+ row 6)**	na	3,871.24	8,197.60	12,010.84	15,917.96	22,751.64	35,653.58	46,285.89	57,585.70	Author's calculations
12	**Basic Education Expenditure (BEE) (= row 4+ row 8)**	na	na	na	na	na	8,258.90	13,673.70	17,670.00	22,350.30	
	Education Expenditure Indicators										
13	**TEE as % of GDP (= row 11 / row 1 *100)**	na	3.55	3.24	3.24	2.92	2.83	3.05	3.06	3.05	Author's calculations
13a	**Public exp on education as % GDP**	na	na	3.50	3.50		3.30	na	na	na	UNESCO Institute for Statistics, www.uis.unesco.org
13b	**Public exp on education as % GDP**	na	3.56	na	3.54	3.52	na	3.28	na	na	EdStatshttp://devdata.worldbank.org/edstats/cd5.asp
13c	**Public exp on education as % GDP from**	3.30	3.60	na	na	na	na	na	na	na	World Bank, 2000,Hidden Challenges to Education Systems in Transition Economies
14	**TEE as % of TGE (=row 11 / row 10 *100)**	na	13.49	12.96	13.20	12.39	12.47	14.00	14.49	14.05	
15	**Recurrent TEE as % of recurrent TGE**	na	na	na	na	na	na	na	na	na	
16	**G & S as % of Recurrent TEE**	na	na	na	na	na	na	na	na	na	
		na									
17	**BEE as % of GDP (= row 12 / row 1 *100)**		na	na	na	na	1.03	1.17	1.17	1.18	Author's calculations
18	**BEE as % of TEE (= row 12 / row 11 *100)**	na	na	na	na	na	36.30	38.35	36.18	38.81	Author's calculations
19	**Recurrent BEE as % of recurrent TEE**	na	na	na	na	na	na	na	na	na	
20	**G & S as % of Recurrent BEE**	na	na	na	na	na	na	na	na	na	
21	**TEE per student (thous ROL/student) (= row 11 / row 23)**	na	825.72	1,765.45	2,593.48	3,476.77	4,983.62	7,828.27	10,293.11	12,875.53	Author's calculations
22	**BEE per student (thous ROL/student) (= row 12 / row 25)**	na	na	na	na	na	3,424.79	5,892.47	8,037.99	10,531.54	Author's calculations

ANNEX D. TRENDS IN MAJOR BASIC DEVELOPMENT OF EDUCATION INDICATORS

D.1. ROMANIA'S GROSS ENROLLMENT RATES FOR BASIC EDUCATION 1990-2004

Year	School-age Population*			Enrollment (Public and Private)** (number of students)			Gross Enrollment Ratios (authors' calculations)			Gross Enrollment Ratios in Basic Ed, World Bank, Hidden Challenges to Education Systems in Transition Economies	Gross Enrollment Ratios in Primary Ed, World Bank, Ed Stats	Gross Enrollment Ratios in Primary Education, UNESCO EFA Global Monitoring Report, Table 5	Gross Enrollment Ratios in Primary Education, UNESCO Institute for Statistics	Net Enrollment Ratios**			Gender Parity for Gross Enrollment Ratios in Primary and Secondary Education (combined)	Gender Parity for Net Enrollment Ratios
	Ages 7-14	Ages 7-10	Ages 11-14	Total Basic Education, of which:	Primary Education	Lower-Secondary (*Gimnaziu*) Education	Total Basic Education, of which:	Primary Education	Lower-Secondary (*Gimnaziu*) Education					Total Basic Education, of which:	Primary Education	Lower-Secondary (*Gimnaziu*) Education		
0	1=2=3	2	3	4=5+6	5	6	7=4/1*100	8=5/2*100	9=6/3*100	10	11	12	13	14	15	16	17	18
1990/1991	2,995,521	1,412,322	1,583,199	2,730,306	1265628	1,464,678	91.15	89.61	92.51	89.50	91.30	91.30	91.30	na	81.20	na	95.00	na
1991/1992	2,917,318	1,343,840	1,573,478	2,639,279	1223213	1,416,066	90.47	91.02	90.00	89.40	na	na	na	na	na	na	na	na
1992/1993	2,870,587	1,314,506	1,556,081	2,572,454	1213815	1,358,639	89.61	92.34	87.31	89.60	na	na	na	na	na	na	na	na
1993/1994	2,773,521	1,290,918	1,482,603	2,533,491	1250958	1,282,533	91.35	96.90	86.51	90.30	na	na	na	na	na	na	na	na
1994/1995	2,755,215	1,354,738	1,400,477	2,532,169	1351135	1,181,034	91.90	99.73	84.33	91.40	na	na	na	na	na	na	na	na
1995/1996	2,725,510	1,399,649	1,325,861	2,541,945	1391951	1,149,994	93.26	99.45	86.74	92.60	99.90	na	na	na	92.00	na	100.40	na
1996/1997	2,698,158	1,400,744	1,297,414	2,546,231	1,405,308	1,140,923	94.37	100.33	87.94	93.90	na	na	na	na	na	na	na	na
1997/1998	2,693,030	1,407,614	1,285,416	2,559,766	1,373,079	1,186,687	95.05	97.55	92.32	95.00	na	na	na	na	na	na	na	na
1998/1999	2,636,628	1,287,538	1,349,090	2,556,930	1,284,507	1,272,423	96.98	99.76	94.32	na	na	104.30	104.30	na	95.71	na	100.21	0.99
1999/2000	2,581,400	1,187,783	1,393,617	2,498,139	1,189,058	1,309,081	96.77	100.11	93.93	na	na	na	na	na	93.20	na	100.26	0.99
2000/2001	2,481,248	1,086,527	1,394,721	2,411,505	1,090,172	1,321,333	97.19	100.34	94.74	na	98.80	98.80	98.80	na	92.78	na	100.10	0.99
2001/2002	2,392,317	989,074	1,403,243	2,320,536	1,028,697	1,291,839	97.00	104.01	92.06	na	98.00	98.00	98.00	na	88.45	na	100.24	0.99
2002/2003	2,245,133	955,812	1,289,321	2,198,312	990807	1,207,505	97.91	103.66	93.65	na	na	na	na	na	na	na	na	na
2003/2004	2,090,000	877,000	1,213,000	2,122,226	1,005533	1,116,693	101.54	114.66	92.06	na	na	na	na	na	na	na	na	na
2004/2005	1,953,000	849,000	1,104,000	1,975,187	962,586	1,012,601	101.14	113.38	91.72	na	na	na	na	na	na	na	na	na

*School-Age Population at 1 Jul. of each year, with the exception of 1992/93, where ages were recorded as of 7 Jan. in the 1992 population census.
** Numbers from 2000/01 to 2003/2004 include students enrolled in both public and private education.
*** Figures exist for net enrollment ratios in secondary education (including both lower and upper-secondary education), but not for basic or lower-secondary education

Sources for primary data:
School-Age Population: For 1990-2002, National Institute for Statistics, Romanian Statistical Yearbooks, 1991 and 1994 through 2003. For 2003-2004, projections from World Bank Health, Nutrition, and Population Statistics, http://devdata.worldbank.org/hnpstats/.
Enrollment levels: National Institute for Statistics Education in Romania: Statistical Data, 2004.
Other data sources:
Gross Enrollment Ratios: World Bank, 2000, Hidden Challenges to Education Systems in Transition Economies, and UNESCO EFA Global Monitoring Report 2005, and UNESCO UIS.
Net Enrollment Ratios: World Bank EdStats (http://devdata.worldbank.org/edstats) for 1990/91 and 1995/96, UNESCO EFA Global Monitoring Report, 2003/04 and 2005 (http://portal.unesco.org/education) for 1998/99 to 2001/02.
Gender Parity for Gross Enrollment Ratios: World Bank Ed Stats (http://devdata.worldbank.org/edstats) for 1990, and UNESCO Institute for Statistics (www.uis.unesco.org) for 1998/99 to 2002/03.
Gender Parity for Net Enrollment Ratios: UNESCO Institute for Statistics (www.uis.unesco.org).

D.2. ROMANIA'S GRADUATION AND REPETITION RATES IN BASIC EDUCATION, 1994/95 TO 2003/04

Year	Enrolled at the end of the School Year (number of students)				Graduation Rate (number of students)				Graduation Rate (%)				Repetition Rate (number of students)			Repetition Rate (%)		
	Total Basic Education, of which:*		Primary Education	Lower-Seconday (*Gimnaziu*) Education	Total Basic Education, of which:*		Primary Education	Lower-Seconday (*Gimnaziu*) Education	Total Basic Education, of which:*		Primary Education	Lower-Seconday (*Gimnaziu*) Education	Total Basic Education, of which:	Primary Education	Lower-Secondary (*Gimnaziu*) Education	Total Basic Education, of which:	Primary Education	Lower-Secondary (*Gimnaziu*) Education
	Male and Female, of which:	Female			Male and Female, of which:	Female			Male and Female, of which:	Female								
0	1=3+4	2	3	4	5=7+8	6	7	8	9=5/1*100	10=6/2*100	11=7/3*100	12=8/4*100	13=14+15	14	15	16=13/1*100	17=14/3*100	18=15/4*1000
1994/1995	2,472,036	1,207,309	1,327,697	1,144,339	2,379,431	1,173,761	1,281,507	1,097,924	96.25	97.22	96.52	95.94	81,772	42,688	39,084	3.31	3.22	3.42
1995/1996	2,486,479	1,213,646	1,368,299	1,118,180	2,392,547	1,181,159	1,318,188	1,074,359	96.22	97.32	96.34	96.08	84,965	46,604	38,361	3.42	3.41	3.43
1996/1997	2,489,578	1,215,834	1,379,371	1,110,207	2,399,325	1,185,513	1,330,212	1,069,113	96.37	97.51	96.44	96.30	83,070	46,380	36,690	3.34	3.36	3.30
1997/1998	2,503,522	1,223,420	1,348,218	1,155,304	2,403,446	1,189,441	1,295,342	1,108,104	96.00	97.22	96.08	95.91	94,056	50,597	43,459	3.76	3.75	3.76
1998/1999	2,495,701	1,220,056	1,258,298	1,237,403	2,391,111	1,185,380	1,206,815	1,184,296	95.81	97.16	95.91	95.71	97,512	48,829	48,683	3.91	3.88	3.93
1999/2000	2,440,035	1,192,117	1,164,341	1,275,694	2,337,930	1,157,391	1,117,731	1,220,199	95.82	97.09	96.00	95.65	91,148	42,798	48,350	3.74	3.68	3.79
2000/2001	2,362,209	1,153,720	1,070,660	1,291,549	2,259,340	1,118,423	1,026,152	1,233,188	95.65	96.94	95.84	95.48	92,386	41,059	51,327	3.91	3.83	3.97
2001/2002	2,262,422	1,103,337	1,008,428	1,253,994	2,175,370	1,073,516	972,000	1,203,370	96.15	97.30	96.39	95.96	77,711	33,694	44,017	3.43	3.34	3.51
2002/2003	2,144,219	1,044,999	972,915	1,171,304	2,065,332	1,018,134	941,045	1,124,287	96.32	97.43	96.72	95.99	72,417	29,977	42,440	3.38	3.08	3.62
1994/1995	2,067,409	1,006,871	985,522	1,081,887	1,993,455	981,842	956,258	1,037,197	96.42	97.51	97.03	95.87	68,283	27,634	40,649	3.30	2.80	3.76

*Numbers from 2000/01 to 2003/2004 include students enrolled in both public and private education.

Source: National Institute for Statistics, 2004, Education in Romania: Statistical Data, Table 3.10, page 51, for figures from 1994/95 to 2002/03. National Institute for Statistics, 2005, Primary and Lower-Secondary Education at the End of the 2003/04 School Year, Tables 1 and 2, pp. I-II, for 2003/04.

Case Study: Romania

D.3. ROMANIA'S DROP-OUT IN BASIC EDUCATION, 1990/91 TO 2003/04

Year	Enrolled at the Beginning of the School Year	Enrolled at the End of the School Year	Drop-Out Rate	
	thousand students	thousand students	thousand students	%
0	1	2	3=1-2	4=3/1*100
1990/1991	2,701	2,652	49	1.81
1991/1992	2,609	2,575	34	1.30
1993/1994	2,541	2,503	38	1.50
1994/1995	2,500	2,485	15	0.60
1995/1996	2,496	2,472	24	0.96
1996/1997	2,505	2,487	18	0.72
1997/1998	2,510	2,490	20	0.80
1998/1999	2,523	2,504	19	0.75
1999/2000	2,519	2,496	23	0.91
2000/2001	2,462	2,440	22	0.89
2001/2002	2,376	2,362	14	0.59
2002/2003	2,290	2,262	28	1.22
2003/2004	2,171	2,145	26	1.20
2003/2004	2,099	2,067	32	1.52

*Drop-out rates are defined as the ratio between the difference in the number of students enrolled at the beginning and at the end of the school year and the number of students at the beginning of the school year.

Source: Ministry of Education and Research, for 1990/91 to 2003/04; and NIS, 2005, Primary and Lower-Secondary Education at the End of the 2003/2004 School Year, Table 1, p. I.

D.4. DROP-OUT RATES IN BASIC EDUCATION, URBAN/RURAL AND PRIMARY/LOWER-SECONDARY: ROMANIA, 2003/04

Urban/Rural	Enrolled at the Beginning of the School Year			Enrolled at the End of the School Year			Drop-Out Rate					
	number of students			number of students			number of students			%		
	Total	Primary Education	Lower-Secondary (*Gimnaziu*) Education	Total	Primary Education	Lower-Secondary (*Gimnaziu*) Education	Total	Primary Education	Lower-Secondary (*Gimnaziu*) Education	Total	Primary Education	Lower-Secondary (*Gimnaziu*) Education
0	1=2+3	2	3	4=5+6	5	6	7=1-4	8=2-5	9=3-6	10=7/1*100	11=8/2*100	12=9/3*100
Total, of which:	2,098,693	997,615	1,101,078	2,067,409	985,522	1,081,887	31,284	12,093	19,191	1.49	1.21	1.74
Urban	1,061,513	459,177	602,336	1,048,201	454,429	593,772	13,312	4,748	8,564	1.25	1.03	1.42
Rural	1,037,180	538,438	498,742	1,019,208	531,093	488,115	17,972	7,345	10,627	1.73	1.36	2.13

Source: National Institute for Statistics, 2005, Primary and Lower-Secondary Education at the End of the 2003/2004 School Year, Table 1, p. I.

D.5. EIGHTH GRADE (CAPACITATE/NATIONAL TESTS) EXIT EXAMINATIONS: ROMANIA, 1999 TO 2004

Year	Session	Number of students enrolled in the 8th grade at the end of the school year	Number of students who graduated from the 8th grade	Number of students registered for the exam			Number of students who took the test			Number of students who passed			Pass Rate (%)		
				Current cohort	Previous cohorts	Total registered	Current cohort	Previous cohorts	Total exam-takers	Current cohort	previous cohorts	Total passed	Current cohort	Previous cohorts	Total passed
0	1	2	3	4	5	6	7	8	9	10	11	12	13=10/7*100	14=11/8*100	15=12/9*100
1999	June	277314	271092	na	na	261345	na	na	255547	na	na	198364	na	na	77.62
	August	na	na	na	na	na	na	na	na	na	na	na	na	na	na
	Total	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2000	June	285688	278861	260350	5277	265627	256219	4561	260780	198702	2058	200760	77.55	45.12	76.98
	August	na	na	na	na	na	na	na	na	na	na	na	na	na	na
	Total	na	na	na	na	na	na	na	na	na	na	na	na	na	na
2001	June	305598	na	na	na	291446	na	na	286072	na	na	203586	na	na	71.17
	August	na	na	na	na	73698	na	na	6813	na	na	46020	na	na	67.07
	Total	304720	296719	na	na	291446	na	na	286072	na	na	249606	na	na	87.25
2002	June-July	na	na	na	na	278911	na	na	273586	na	na	214685	na	na	78.47
	August	na	na	na	na	67031	na	na	63035	na	na	33239	na	na	52.73
	Total	313623	305882	na	na		na	na	277720	na	na	247924	na	na	89.27
2003	June	na	na	na	na	271430	na	na	267548	na	na	198760	na	na	74.29
	August	na	na	na	na	78915	na	na	71478	na	na	41043	na	na	57.42
	Total	310917	302774	na	na		na	na		na	na		na	na	na
2004	June-July	300512	292269	na	na	266840	na	na	260135	na	na	206207	na	na	79.27
	August	na	na	na	na	78915	na	na	71478	na	na	41043	na	na	57.42
	Total	310917	302774	na	na	na	na	na		na	na		na	na	na

Sources:

National Institute for Statistics, 2004, "Education in Romania: Statistical Data," Table 3.10, for number of students enrolled in 8th grade at the end of the school year and numer of graduates, for 1999 to 2003.

National Institute for Statistics, 2005, Primary and Lower-Secondary Education at the End of the 2003-2004 School Year, Table 1, for number of students enrolled in 8th grade at the end of the school year and number of graduates, for 2004.

National Assessment and Examinations Service, "Capacitate and National Test Exam Reports," 1999 to 2004.

D.6. TWELFTH GRADE (*BACALAUREAT*) EXIT EXAMINATIONS: ROMANIA, 2000 TO 2004

Year	Session	Number of students who took the exam	Number of students who passed the exam	Pass Rate (%)
0	1	2	3	4=3/2*100
2000	June	169130	143690	84.96
	August	na	na	na
	overall	171000	143917	84.16
2001	June-July	158989	137173	86.28
	August	23542	17406	73.94
	overall	158989	154579	97.23
2002	June-July	142993	123987	86.71
	August	22000	14443	65.65
	overall	145987	138430	94.82
2003	June-July	166154	127632	76.82
	Aug-Sept	42234	28982	68.62
	overall	na	na	na
2004	June-July	169313	143235	84.60
	Aug-Sept	31001	22208	71.64
	overall	na	na	na

D.7. TRENDS IN LABOR FORCE STATISTICS: ROMANIA, 1991 TO 2004

Year	Labor Force* (thousand persons)			Out of the Lbor Force* (thousand persons)	Labor Force Participation Rate* (%)	Employment Rate* (%)	ILO Unemployment Rate* (%)	Registered Unemployment Rate** (%)
	Total	Employed	Unemployed					
1991								3.00
1992								8.20
1993								10.40
1994								10.90
1995								9.50
1996	12,266	11,543	712	10,353	67.70	63.70	5.80	6.60
1997	12,232	11,558	674	10,314	67.30	63.60	5.51	8.90
1998	12,016	11,343	673	10,487	66.00	62.30	5.60	10.40
1999	11,984	11,280	704	10,474	65.70	61.80	5.87	11.80
2000	11,998	11,234	764	10,437	65.40	61.30	6.37	10.50
2001	11,890	11,220	670	10,519	64.50	60.90	5.63	8.80
2002	10,386	9,608	778	11,409	57.60	53.30	7.49	8.40
2003	10,250	9,612	638	11,484	56.60	53.10	6.22	7.20
2004	10,170	9,399	771	11,504	56.00	51.70	7.58	3.00

Notes:

Third quarter data.
End of year (December data.

Sources: National Institute for Statistics, 2005, The Labor Force in Romania: Employment and Unemployment in the Third Quarter of 2004, Table 1.1., for labor force survey data. National Institute for Statistics, Statistical Yearbook, 2003, Table 3.1.14 for administrative data from 1991 to 2002. National Institute for Statistics, http://www.insse.ro/Indicatori/San_2004/rom/Indicatori_sociali_an_2004.htm and http://www.insse.ro/Indicatori/San_2005/rom/Indicatori_sociali_an_2005.htm, for the registered unemployment rate for 2003 and 2004).

D.8. EMPLOYMENT AND UNEMPLOYMENT, BY EDUCATION AND GENDER: ROMANIA, THIRD QUARTER 2004

Education and Gender	Labor Force, of which:					Unemployment Rate	Unemployment Duration			
	Total Labor Force	Employed	ILO Unemployed				under 6 months	6-11 months	12-23 months	24 months and over
			Total Unemployed, of which:	Unemployed with no previous work history	Unemployed with previous work history					
0	1=2+3	2	3=4+5	4	5	6=3/1*100	7	8	9	10
Male	**5544401**	**5071763**	**472638**	**181255**	**291383**	**8.52**	**103545**	**81377**	**91629**	**196088**
Low level of education	***1374438***	***1237193***	***137245***	***67823***	***69422***	***9.99***	***25106***	***21909***	***21797***	***68433***
No school (ISCED 0)	51882	42121	9761	*	*	18.81	*	*	*	*
Primary (ISCED 1)	320947	296217	24730	10342	14388	7.71	*	*	*	12347
Lower-secondary (gimnaziu) (ISCED 2)	1001609	898855	102754	51635	51119	10.26	19273	16234	16839	50408
Medium level of education	***3562782***	***3250200***	***312582***	***100814***	***211768***	***8.77***	***68681***	***54515***	***66730***	***122655***
Some high school (grades IX and X)	226428	204087	22341	*	20639	9.87	*	*	*	13542
Vocational and apprenticeship (ISCED 3)	1846993	1666982	180011	55990	124021	9.75	40179	29097	39475	71260
High School (ISCED 3)	1252090	1153044	99046	41126	57920	7.91	23491	19172	20402	35981
Post-high school vocational (ISCED 4)	237271	226087	11184	*	9188	4.71	*	*	*	*
High level of education (ISCED 5)	***607181***	***584370***	***22811***	***12618***	***10193***	***3.76***	***9759***	*****	*****	*****
Short-term higher education	96590	90648	*	*	*	*	*	*	*	*
Long-term higher education (including Masters and Doctorate)	510591	493722	16869	9644	7225	3.30	7696	*	*	*
FEMALE	**4625010**	**4327050**	**297960**	**138953**	**159007**	**6.44**	**75368**	**59931**	**53027**	**109634**
Low level of education	***1387877***	***1319455***	***68422***	***37757***	***30665***	***4.93***	***16539***	***9761***	***16155***	***25968***
No school (ISCED 0)	60402	56573	*	*	*	*	*	*	*	*
Primary (ISCED 1)	382489	374948	7541	*	*	1.97	*	*	*	*
Lower-secondary (gimnaziu) (ISCED 2)	944986	887934	57052	31814	25238	6.04	12489	9309	13620	21634

(D.8 continued)										
Education and Gender	**Labor Force, of which:**					**Unemployment Rate**	**Unemployment Duration**			
	Total Labor Force	**Employed**	**ILO Unemployed**				under 6 months	6-11 months	12-23 months	24 months and over
			Total Unemployed, of which:	Unemployed with no previous work history	Unemployed with previous work history					
0	1=2+3	2	3=4+5	4	5	6=3/1*100	7	8	9	10
Medium level of education	***2662530***	***2459759***	***202771***	***83009***	***119762***	***7.62***	***49393***	***42459***	***32674***	***78245***
Some high school (grades IX and X)	220567	206571	13996	*	10281	6.35	*	*	*	6856
Vocational and apprenticeship (ISCED 3)	821807	758764	63043	22043	41000	7.67	12189	15727	9360	25767
High School (ISCED 3)	1401590	1285939	115651	52801	62850	8.25	33308	22381	19623	40339
Post-high school vocational (ISCED 4)	218566	208485	10081	*	*	4.61	*	*	*	*
High level of education (ISCED 5)	***574603***	***547836***	***26767***	***18187***	***8580***	***4.66***	***9435***	***7710***	*****	*****
Short-term higher education	111044	108383	*	16018	8088	21.71	7432	7214	*	*
Long-term higher education (including Masters and Doctorate)	463559	439453	24106	*	*	*	*	*	*	*
TOTAL	**10169411**	**9398813**	**770598**	**320208**	**450390**	**7.58**	**178913**	**141308**	**144656**	**305722**
Low level of education	***2762315***	***2556648***	***205667***	***105580***	***100087***	***7.45***	***41645***	***31670***	***37952***	***94401***
No school (ISCED 0)	112284	98694	13592	8326	*	12.11	*	*	*	6839
Primary (ISCED 1)	703436	671165	32271	13806	18465	4.59	*	*	*	15520
Lower-secondary (gimnaziu) (ISCED 2)	1946595	1786789	159806	83449	76357	8.21	31762	25543	30459	72042
Medium level of education	***6225312***	***5709959***	***515353***	***183823***	***331530***	***8.28***	***118074***	***96974***	***99404***	***200900***
Some high school (grades IX and X)	446995	410658	36337	*	30920	8.13	*	*	*	20399
Vocational and apprenticeship (ISCED 3)	2668800	2425746	243054	78033	165021	9.11	52368	44824	48835	97027
High School (ISCED 3)	2653680	2438983	214697	93927	120770	8.09	56799	41553	40025	76320
Post-high school vocational (ISCED 4)	455837	434572	21265	*	*	4.67	*	*	*	*
High level of education (ISCED 5)	***1181784***	***1132206***	***49578***	***30805***	***18773***	***4.20***	***19194***	***12664***	***7300***	***10421***
Short-term higher education	207634	199031	40975	25662	15313	19.73	15128	11406	*	8901
Long-term higher education (including Masters and Doctorate)	974150	933175	8603	*	*	0.88	*	*	*	*

D.9. AVERAGE EDUCATION AND ESTIMATED RETURNS TO EDUCATION: ROMANIA, 1950 TO 2000

	1950-54	1955-59	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-93	1994	1995	1996	1997	1998	1999	2000
Sample Means																
S	9.04 (3.70)	9.40 (3.88)	8.39 (3.62)	8.61 (3.52)	9.23 (3.29)	9.91 (3.29)	10.62 (3.21)	10.88 (2.79)	11.18 (2.49)	11.37 (2.87)	11.43 (2.78)	11.76 (2.60)	11.89 (2.56)	11.99 (2.52)	12.09 (2.50)	12.19 (2.41)
Least Absolute Deviation (LAD) Regression Coefficients																
S	0.027* (0.011)	0.030* (0.009)	0.041* (0.006)	0.038* (0.006)	0.033* (0.005)	0.034* (0.004)	0.038* (0.003)	0.033* (0.003)	0.048* (0.007)	0.056* (0.001)	0.065* (0.001)	0.068* (0.001)	0.065* (0.002)	0.075* (0.001)	0.079* (0.001)	0.083* (0.001)
Pseudo R^2	0.021	0.047	0.054	0.043	0.057	0.085	0.072	0.063	0.435	0.154	0.154	0.173	0.156	0.179	0.173	0.185
N	459	609	854	805	1237	1339	1676	2606	1228	25565	23644	23919	15508	12518	18963	17486

Notes:
Dependant variable is the natural log of net monthly wages of employees aged 15 to 59.
S is schooling in years.
N is the number of observations.
Standard deviations and standard errors are shown in parentheses. For ease of reading, an asterisk (*) is placed next to each estimated coefficient with a value at least twice its standard error.
Regressions include controls for potential experience (in years), gender (female dummy), monthly time trends (in quadratic form) for 1950 to 1993, and monthly dummies for 1994 to 2000.

Source: Andren, Earle, and Sapatoru (2005).

ANNEX E. DATA COLLECTION METHODOLOGY

The study relies on six distinct data sources: Bank documents and reports (see list in annex G); research/evaluation studies (see list in annex H); statistical and learning outcome data; interviews with Government and non-Government players in the sector (see annex I for the list of those interviewed and annex J for the guidance questionnaire); interviews with Bank staff (see annex K for the guidance questionnaire); and school observations (see annex L for the school visit instrument).

Published statistics and data on learning outcomes came from several sources:

- World Bank data series, such as the World Development Indicators.
- The Bank's Romania economic and sector studies that include statistical data and the results of special analyses.
- Romania's National Institute of Statistics. The Institute conducts surveys and collects administrative data. Data sources include surveys of living conditions (e.g., income, consumption, poverty, dwelling conditions); surveys of labor force characteristics and dynamics (e.g., labor force survey, enterprise survey, survey of wages and occupations); surveys of social services, including semi-annual surveys of education inputs and outputs; and demographics.
- limited new analyses of household surveys. Special analyses of net enrollment rates by poverty quintile, urban/rural residence, region, ethnicity, and gender were commissioned.
- learning outcome data from Romanian and international learning assessments (see following table).

Type and schedule of pre-tertiary examinations and assessments

Learning Assessment	Nature of Assessment	Years Administered					
		1st	2nd	3rd	4th	5th	6th
4th grade	Sample	1998	2000	April 2005			
8th grade	Universe	1999	2000	2001	2002	2003	2004
12th grade	Universe	2000	2001	2002	2003	2004	
TIMSS (8th grade)	Sample	1995	1999	2003			
PISA (15 year olds)	Sample	2000					
PIRLS	Sample	April 2005					

Notes. The Institute for Educational Sciences administers the TIMSS; the National Assessment and Examinations Service, all other assessments and examinations. The 8th grade examination is known as the *capacitate* exam; the 12th grade exam, as the *baccalaureate* exam.

The sampling frame for the interviews was defined to include Governmental, quasi-Governmental, NGO, and civil society players, World Bank staff, and donors.[34] The

[34] Those most knowledgeable about Romania's reform history were also the most committed to particular reforms and thus potentially biased. The team tried to manage this potential by "balancing" the interview sample—i.e., interviewing individuals with different views; asking individuals for comments on views that conflicted with theirs; and raising questions about evidence (e.g., learning outcome data) that contradicted stated beliefs.

school visits had a dual purpose: observations (of schools and schooling) and interviews with service providers (teachers, school principals, and local administrators) and beneficiaries (parents and students). Eight schools were visited, selected purposively on the basis of the sampling frame in the following table and with an eye to establishing "limiting cases". Thus, the urban
sample consisted of Bucharest schools on the assumption that intended reforms (e.g., new curricula, pedagogy, textbooks) were more apt to be implemented in the capitol. These

Purposive sampling frame for school visits

SES of Clientele	Residential Location	
	Urban	Rural
High SES	2	2
Low SES	2	2

schools were proximate to reform discussions; teachers were more apt to have had access to the training required to integrate intended curricula and pedagogy into actual practice; these schools were less subject to textbook distribution problems. If intended reforms were not implemented adequately in Bucharest schools, it was reasoned that they would be unlikely to have been adequately implemented in remote rural schools. The rural sample consisted of four schools in the *judet* of Sibiu that had been part of the pilot for the Rural Education Project. Again, it was reasoned that if intended reforms had not implemented adequately in these schools, they were unlikely to have been implemented in rural schools excluded from the pilot. Stratifying the sample by SES of clientele yielded some information on the equity of the system's formal and informal mechanisms for allocating inputs.

ANNEX F: SUMMARY OF OBSERVATIONS FROM SCHOOL VISITS

Objectives In complement to the interviews and document review strategies employed for completing this report, the mission team was asked to visit schools to gain a better understanding of the impact of World Bank assistance in basic education in Romania. The primary objective of the visits was to get a sense of the depth, significance and understanding of World Bank investment funds in the experience of the school as well as gain an understanding of what a Romanian school looks and "feels" like. Given the short time frame (four days), the school visits were not meant to be representative of the universe of schools in Romania nor comprehensive within each school; visits to each school were only about four hours in duration, enough time for interviews with key personnel, parents, students and a brief tour of the facilities.

Methodology To gain an understanding of both rural and urban schools, the team elected to visit four schools in the capital city and four schools in outlying areas of a mid-sized *judet* (province) in the center of the country. Schools in Bucharest were selected from a list of schools (provided by the Ministry of Education) serving low and middle income families: two schools from the low income group and two schools from the middle income group were chosen. In rural areas, we selected schools based on their participation in the World Bank projects. Two of the schools were participants in the rural pilot program with one of these acting as a training school for rural teachers in outlying areas, one school had received funding under the school rehabilitation project and the remaining school had recently been awarded a community grant. Schools were contacted by our resident Romanian team member several days prior to our arrival. In each school the principal was asked to participate in a relatively brief visit by World Bank education consultants for the purpose of understanding the situation of public schools in Romania. No school declined to participate. In each school the principal, two teachers, at least one parent and one student were interviewed (in one village school we were unable to interview a student). In the rural areas we also interviewed a member of the school inspectorate team.

In order to structure the conversations with school staff and community members, we developed an interview protocol (found at the end of this annex) based on four main areas for discussion: inputs, processes, outputs and outcomes. *Inputs* are those physical and human resources that comprise the school and its facilities, including textbooks, materials, and number of teachers. To catalog school inputs we used both observation (tally of number of computers, desks, etc.) and interviews. The next segment of interest is *processes*, or how things work at the school, including support from the local council and school inspectorate, support within the school, and the role of the community in school operations. *Outputs* are the immediate results of World Bank or Ministry project investments (books, materials, etc). Finally, *outcomes* are the long-term results of the projects. Without a control group it is difficult to separate out what outcomes might have occurred in the absence of World Bank support. For this reason the discussion with parents and students focuses on their perceptions of changes in the school as well as expectations for future prospects for the education of the child. All interviewees were guaranteed anonymity for both themselves and their school.

Observations from Urban Schools As mentioned above, our team visited four urban public schools in the capital city of Bucharest. Two of the four schools we visited were close to the city center—these served middle to upper-middle income families. A third school was located a bit farther out, in one of the sections of town with numerous apartment blocks (constructed under the Ceacescu regime as part of a mass forced migration plan of rural areas). The fourth school was located in the urban periphery, having once been a farming suburb of Bucharest, the area had been incorporated into the sprawling capital and was now home to lower middle class commuters. A summary of the main observations drawn from the visits is provided in the pages that follow.

Inputs. All four schools possessed minimum conditions for learning, defined as sufficient classrooms, desks, books and teachers for the student population. Where the schools differed was on the margin, with the two city center schools benefiting from up-to-date computer labs, science materials, well-equipped science labs, new desks and well-stocked libraries. While many of the differences in school facilities and materials can be explained by historical preferences for school support (communities with greater political power and wealth able to leverage more resources for their school), at least part of the explanation for differences in the distribution of resources can be attributed to parent association contributions. In the most well-off school, contributions from parents amounted to one-third of the per student allocation received for primary grade students from the local council, while another school reported in-kind contributions such as a television (received from a parent for their child's classroom). Schools also received funds from other agencies, including local NGOs, the European Investment Bank, and the EU's PHARE project. Libraries in several schools benefited from donations by parents and other community groups, while parents in one school painted murals of prominent saints on the walls of the religion classroom (see photo below). The two outlying schools did not offer secondary classes; each of these enrolled about 500 students. The two schools with high school courses had roughly 1300 students each. All schools operated in two shifts, with primary grade students attending in the morning and lower and upper secondary students in the afternoon. Differences in resources were not, however, necessarily related to the number of students enrolled. Importantly, even within our small sample we observed substantial differences in the quality of facilities and availability of materials between schools, regardless of size or location.

Processes. We found the level of experience of school staff to be fairly equal across schools. School principals interviewed had on average three years experience as a principal in the school, with about ten years teaching experience prior to assuming administrative responsibilities. In one case, the principal had been working in the school for twenty-five years. Teachers interviewed in the outlying schools were slightly younger, with fewer years of experience than their peers interviewed in the city center schools.

In commenting about the interactions schools have with both funding and administrative agencies, most schools reported positive relations with the local town council, citing support for physical improvements (new windows, roof replacement, renovated gym, etc.). Principals reported that school inspectorates conduct monthly visits, the content of which included both pedagogical suggestions and notations of equipment and facilities needs. One school stated that on a recent visit, the school inspectorate had suggested additional personal academic planning for the students; this school further indicated that last year's inspection was a week long and included interviews of students and community members. Most principals also cited close collaboration with the teacher training institute, *Casa Corpuli Didactic* (CCD). Several teachers and two principals reported receiving training through the CCD in the last year.

Teachers and principals characterized the relationship between parents and the school as moderate to excellent. In one sub-urban school, the principal reported that most parents had attended the school as students themselves. Both the principal and teachers commented that despite the low social status of many members of the community, the high level of involvement of the church, town hall, and parents helped to ensure respectful behavior on the part of students. Most of the primary and lower secondary students reside in the local community, while in the more competitive schools, high school students commuted from throughout the city.

Outputs. Discussions regarding changes in the school in recent years as a result of World Bank or Ministry funding centered on curriculum reform efforts during the project period. Opinions differed as to the benefits of the curriculum reforms instituted (and then partially rescinded) during the last decade. Several comments were made regarding the diversity and complexity of the curriculum, noting that initial resistance to changes has been replaced by grudging

acceptance of teachers (parents have been harder to convince). Several teachers and parents reported that the new curriculum was overly comprehensive and lacking in practicality. New student-centered methods were reported to be employed by most teachers in the school, though staff were hard pressed to indicate how this had improved student learning. One principal commented that the existence of numerous exams drained much of the time and resources of both students and school staff. A second frequent topic of debate was the change in the grading system for primary school students from a grade-based to a qualitative evaluation process. One school complained of parent opposition to this particular reform, though several teachers acknowledged that this caused less stress for primary school students; all agreed that the transition to lower secondary and change in grading systems was very difficult. Teachers commented on the need for a change in the alternative textbook policy, which is based on teacher review of the books and allows for selection of new textbooks only every four years. One teacher stated that they were only given two hours to review the textbooks before having to make a selection of the textbook they would use for the next four years. Finally, several alluded to dramatic changes in society, commenting that today in Romania, children do not look to their teachers as mentors, making teaching more difficult for teachers.

School priorities as identified by school staff included maintaining the number of classes (and therefore teachers) in the context of the declining school-age population, introducing classes that are attractive to potential clientele, and improving results on national tests. Though we heard frequent criticisms of the examination process, each school was quick to report their percentage passed on the 8th grade high school entrance examination. One school reported a fifteen percent failure rate, another indicated that nearly all of the students in lower secondary indicated their same school as a first choice for enrolling in upper secondary schooling. Schools also touted their participation in various academic Olympics and competitions, with principals and teachers commenting on the various prizes their schools had won.

Outcomes. The assessment of outcomes, or in our case parent and student assessments of changes in the school and expectations for student success, relied on only one to two cases in each school. Parent interviewed usually resided in the community, and were contacted directly by the principal to attend the meeting. Several parents commented on the impact of school reforms, including changes in the curriculum (described as more creative by one parent, and new-fangled by another), teaching styles and physical changes to the school. One parent asserted that barriers remain between teachers and parent, but stated that it was up to the parents to overcome this through greater involvement and interest in the school.

Personal out-of-pocket expenditures make up a sizable share of total education expenditures. While a complete analysis of household expenditures in education as a share of GDP was beyond the scope of this report, parent contributions in either in-kind donations or school fees are a not-inconsequential share of the school discretionary budget. Additional expenses for parents include private tutoring lessons for test preparation, supplementary lesson (computers, language, etc.), school supplies, textbooks and transportation. Parents reported spending as much as €100 per month on language lessons.

Parents defined a good school as one with well-trained, permanent and qualified teachers, sufficient security, adequate equipment, few student absences, high levels of collaboration between parents and students, and the ability to provide students the necessary skills for becoming adults. Bad schools were explained as being those that are chaotic, poorly managed, with permissive teachers and discipline/drug problems, with children who are not interested in learning. Consistent with research in other areas, parents deplored the quality of education in general, but stated that their school was a good one. In terms of expectations for future student success, all parents indicated they wanted their child to attend university; in most cases these parents had attended university themselves, though one had only completed high school.

Student responses were quite similar to their parents, through students were more likely to define bad schools as those with drug problems, violence and student behavior issues. Several students focused on the physical plant of the school as a factor in defining a good or bad school. Good schools were those with communicative and understanding teachers, where students are well-behaved and respectful, and teachers have a close relationship with their students. Students also characterized a good school as one that organizes extracurricular activities, and develops students as human beings.

Overall, parents and students were positive about their experiences in the school and optimistic about their prospects for further education. Without exception, those interviewed characterized their own school as one that is “good.” Parents and students felt that the students had a good future ahead of them, with a good chance that they would attend university. With the exception of one student interviewed who thought the high costs of books and other expenses might be a problem, neither parents nor students believed there to be any obstacles to attending university.

As the following pages will show, urban schools appear to offer better chances for their students to succeed in the Romanian Education System than do rural schools. Nonetheless, there appears to be significant variation within the urban school universe to suggest that not all students are provided with the same opportunities to succeed. Student preparation in the primary grades is a key factor for success on the eighth grade placement exam, a fact which schools were well aware of and quick to point out, touting their success rate (measured in percentage of students passing the exam) as evidence of their commitment to greater opportunities for their students. High school placement, in turn, is a prime determinate of opportunities for university enrollment.

Observations from Rural Schools The selection process of rural schools, as described above, was designed around our interest in the piloting of the Rural Education Project that took place in several districts. The four schools visited were quite different in terms of their facilities, teaching staff and student well-being: within the rural sample of school we observed even greater differentiation than we had witnessed among urban schools.

Inputs. The first school we visited was a pilot school for the rural teacher training program designed to provide teachers in far-flung areas with modular training sessions appropriate to their needs. The school, located in a town 30 minutes outside of the provincial capital, had recently been provided a new computer, data/lcd projector and screen for the mentor teacher lectures presented in PowerPoint to 31 teachers from the surrounding area schools. The school offered grades 1-8, with a teacher for each grade and one for pre-school (ages 4-6). Students studied at new, modular desks, few of which we had seen in the capital of Bucharest. Toilet facilities had recently been repaired by the Dutch Foundation (this was the only school with toilet paper in the children's restroom). The 122 children attended school each day from 9 to 2:40 pm. All of the school teachers resided in the regional capital and took the train each day, a 30 minute trip. The school was well-equipped, to the extent that the principal lamented the lack of space for all of the items he had received from donors, including French, Dutch and German bilateral organizations.

Our next visit was to a small primary school, under the adminstrative responsibility of the first school (the principal managed operations in both facilites). Located in a small village 15 minutes by car from its parent school, the two-room school offers grades 1-4 in two classrooms, enrolling approximately 40 students. The physical contrasts to the first school we visited were striking. Students sat at crudely-fashioned wooden desks, few materials adorned the walls, the school was ill-maintained, and the teacher's cupboard was nearly bare of learning materials. Though we entered the school in the middle of a lesson, students did not have notebooks or materials on their desks (the teacher informed me they could note afford these items). There were no toilet facilities, nor running water, and the students were released for the day shortly after we arrived (at about 12:30 pm). Grades one and three were in one room while two and four were in the other; one of the teachers explained that the

classes were structured this way in order to divide the burden of teaching young students to read between the two teachers.

The quality of the physical plant of the third school, some 20 minutes outside of the provincial capital, was somewhere in between the first and second schools. While it did not possess the technology of the first school it was clean, well-maintained, and learning materials were in use during our visit. One classroom had recently been rehabilitated under the auspices of the rural education project school-based grant (one of only seven grants awarded in the province) with the goal of using the room as a community meeting place for parents. Some 150 students in grades 1-8 attend this school, which, despite the limited, but relatively up- to-date computer facilities (above), possessed only outdoor pit toilets. The principal was also responsible for a kindergarten and several other small annexes in the outlying communities. Teachers reported that much of these materials, including maps, computers and microscopes, were supplied by the Rural Education Project. They also commented that their school was well-equipped, rivaling the quality of schools in the provincial capital.

Our final rural school, enrolling 200 students in grades 1-8, had recently been rebuilt with the support of the World Bank School Rehabilitation Project. The school had suffered extensive water damage—according to the principal, when the contractors removed the roof for replacement, the walls "collapsed into mush." The principal lobbied for several years to secure the promise to refurbish the school; eventually the district agreed. In addition to a new building, the school was equipped with running water, indoor plumbing, and new furniture. Classes were well-equipped, if not always efficiently so (note the three globes above). A computer lab (not connected to the Internet) was not functioning, due to the lack of an instructor. Finally, the library, managed by the Romanian teacher, had nearly as many books as some of the Bucharest schools. The main construction complaint was peeling paint (at left), due to poor subcontracting.

Processes. Teacher and Principal experience varied between schools; the teacher with the poorest qualification was found in the small village school. Having failed the certification exam after completing pedagogical high school, the teacher was offered a contract position for one year. With the exception of the small village school, the rural schools visited were in good to excellent physical condition. The principals of these schools commented on their cooperative relationship with the local council, which they cited as a key factor in maintaining and upgrading their school facilities; costs covered by the local council included electricity, gas and paint. School inspectorates were reported as being helpful, and in recent years had become more practical and supportive in their orientation. One teacher suggested that school inspectorates should provide more feedback and comments to teachers, especially novice teachers. Teachers also reported that the mentor teaching program (a pilot program under the Rural Project) is a good course that is adapted to the needs of the teachers and allows for application of the methods taught in class. Having the mentor trainers come to the teachers (in school-based learning centers) was cited as a successful strategy. Several teachers stated that they have daily conversations with their school principal regarding teaching in the classroom. In one school, a teacher had conducted a sample lesson in front of the other primary teachers. Principals also typically are present during the inspections for the first degree examination that teachers undergo with the school inspectorate.

Accompanying us on the first two school visits was a representative from the school inspectorates office, whom we had a chance to interview. The inspector had received numerous opportunities from the World Bank projects for further education, including training sessions abroad and had been working as an inspector in the region for several years. The inspector reported feeling personally responsible for all of the schools under their care. When asked why the small village school was in relatively poor condition, compared to its sponsor school and other rural schools in the area the inspector stated that the village had gone into decline since many of the ethnic Germans left after the revolution. “Gypsies” had since moved in to the area, taken over the old homes, and were not willing or interested in keeping the school up, the inspector asserted. The inspector also reported that on the last visit made to the school, about three months prior to our visit, the inspector had informed the students that they smelled bad and should learn to wash better. The inspector was not aware of any plans for upgrading the school facilities and citied poor communication between the Rural Education Project officials and all other staff in the inspectorate as a reason for the lack of knowledge about project plans.

Parent and community relations seemed poorest in the small village school. One teacher reported that the parents "lied" about how much school work their children do at home and only come to school if there have been discipline problems. This school did not receive any contributions from parents, either in kind or through the parent-teacher association. When asked what they would do for their school if provided with additional resources, the teachers requested energy efficient doors and windows as well as a covered recreation area for times of bad weather. The teachers reported having submitted these needs to the local council, but the other schools in the area had been upgraded instead. Though the school had recently been awarded a community grant, these teachers stated that they were not involved in developing the proposal; rather, the principal at the sponsor school had developed the successful development plan on his own.

The remaining schools reported having an excellent relationship with the community. One school acknowledged some difficulties in working with some members of the Roma population, but had devised a strategy including home visits and regular communication to keep parents involved and informed regarding their child's progress in school. This principal stated that "yes, some families are different, but in those cases we adapt and adjust to their needs, not ours." Many parents of current students had attended the same school, providing additional continuity and a sense of community to the school.

Outputs. Several schools commented that the new curriculum was overly complex, with too many subjects and topics to cover in the school year. At one school, a long discussion ensued regarding recent reforms and the needed progression within the Romanian education system from informative to formative, and traditional to modern. Teachers suggested the religious education should not be compulsory, and perhaps should be substituted for information and communications technology (computers) courses. Teachers also felt that the qualitative assessment system should be extended to grades 5-8 to include those non-academic courses such as drawing, sports and music, performance in which is frequently dependent on innate abilities rather than learned knowledge. Several teachers also commented on the "modern" (student-centered) teaching methods that had been adopted in their schools, with mixed results. One teacher reportedly blends group with individual work in order to ensure that kids from varying backgrounds are getting the needed competencies. Another teacher stated that it was not the method that mattered, but the results, and in their school not all students were interested in taking the national tests.

As mentioned above, the mentor teacher program under the REP was well received by participating teachers. All of the rural schools visited had received or were about to receive materials or assistance from one of the World Bank projects, though distribution of benefits varied greatly. The criteria for school participation in the REP were unclear to both the school inspectorate representative and school staff, implying that greater communication of project activities and targeting mechanisms may be needed. Students also noticed the changes to their schools and improved conditions for learning. One student commented that few students in rural areas attend a school with the same quality of materials and infrastructure that she does.

Outcomes. Expectations for future success were significantly lower in rural schools, compared to urban schools. Teachers, parents and students were not optimistic about student chances for attending university, largely due to the expense of sending a student to the capital or another large city. Teachers in the small village school believed that roughly 30 percent of the students would not even continue on to grade five. Most students showed interest in attending high school, but noted that costs, especially for transportation to the city, could prove prohibitive. Parents were interested in their children obtaining at least a high school education in the provincial capital, and earning a living there rather than in agriculture or other activities in the rural areas where they lived.

To some parents, a good school by definition was located in a developed, urban area. One parent felt that students in the city necessarily performed at a higher level. Rural children also performed less well as they shouldered additional responsibilities, including housework and working in the fields. Two parents stated that there were no bad schools in Romania, adding that "teachers teach, it is students who do not want to learn." Students defined a good school as one in which good teachers convey "everything in life, including moral values." Good schools also have good conditions for learning, especially adequate heating. Conversely, bad schools were thought be ones with bad teachers, poor student behavior and cold classrooms. Only two students interviewed took private lessons, which most students said were only for preparation for the 8th grade exam (and then only the most well off students could afford private tutoring). All students characterized their own school as good (though we did not have a chance to interview a student in the small village school).

In sum, we found greater variation among rural schools than we did among urban schools. According to interviewees, opportunities for attending university, and in some cases even high school, were much more limited in rural areas. The distribution of resources appeared to be more dependent on the local council and individual efforts of school principals, rather than more formalized mechanisms. World Bank efforts in rural areas were present, but several individual expressed confusion regarding the objectives and criteria of the Rural Education Project. Finally, attention to the Roma people through education or other sector efforts is clearly a concern, especially regarding dropout before completing compulsory schooling. Overall, the visits were productive in illuminating the daily life of schools and their students.

ROMANIA SCHOOL VISIT INSTRUMENT (FOUR LEVELS: INPUTS, PROCESS, OUTPUTS, OUTCOMES)

Input Level: Observation Checklist for School and Classroom Characteristics

School Level	Classroom Level (visit one or two)
• Number/Category of Staff • Number of Teachers/Grade/Discipline • Number of Students and Grade/Age Range of Students • Number of Classrooms • Teacher Lounge (Resource Materials, National Curriculum Guides) • Library and Computer Rooms (Number of Books, Terminals, Access) • Bathrooms (Cleanliness) • Cleanliness/Security	• Student work on the walls • Student attendance logs • Audio-visual equipment (blackboard, overhead) • Alignment of Desks • Number of Students • Reading books/Didactic Materials • Textbooks on desks • Cleanliness

Process Level: School Operations/Support/Supervision

Interviewees	Characteristics	Process Questions
School Principal Lower Grade Teacher Upper Grade Teacher	• Age • Gender • Pre-service training • Experience (Years) • Experience in School • Residence in District	• Support and Supervision from district management • Support and Supervision from Principal (Teacher attendance logs?) • Support and Supervision from Curriculum/Pedagogical Director • Interaction with community/parent involvement • Curriculum/School Development Plan/Objective • Characterize role of school in community

Outputs Level: School Relationship to WB Project (Principal Interview Only)

Urban and Rural	Rural Only
• Curriculum Standards • Assessment Participation • Reform/Rehabilitation of Building	• In-Service Teacher Training • Community Grant Experience • Teaching/Learning Materials

Outcomes Level: Community Understanding of Schooling Outcomes

Interviewees	Characteristics	Outcomes Questions
Parent Lower Grade Student Upper Grade Student	• Age • Gender • Experience in School • Distance to school from home (minutes) • Education Level • Older siblings/Educational Attainment	• Characterize any changes in school in recent years • Reason for attending school • Hopes for level of education attainment • Expected level of attainment (and mitigating factors) • A good school is one that . . .(1 important char.) • A bad school is one that . . .(1 important char.) • Characterize your school on these characteristics

ANNEX G. OTHER STATISTICAL TABLES

G.1. Incidence of poverty by characteristic

Characteristic	Probability of Being Poor	Share of Total Poor (%)
Total	0.29	100.0
Gender		
Male	0.29	49.5
Female	0.29	50.5
Residential location		
Urban	0.18	33.2
Rural	0.42	66.8
Ethnic group		
Romanian	0.28	87.6
Hungarian	0.23	4.6
Roma	0.79	6.8
Employment status		
Employee	0.11	9.6
Employer	0.03	0.0
Non-agricultural self-employed	0.41	3.3
Agricultural self-employed	0.55	20.0
Unemployed	0.45	9.3
Pensioner	0.24	20.1
Educational level		
No formal	0.61	4.5
Primary	0.45	17.0
Middle	0.38	28.7
Vocational	0.27	15.3
High school	0.16	12.6
Post-secondary	0.07	0.9

Source: World Bank 2003, Vol. II, tables A-5 and A-6, pp.44-45.

G.2. PER CAPITA LOCAL BUDGET EDUCATIONAL EXPENDITURES, PUBLIC PRIMARY AND LOWER-SECONDARY EDUCATION, BY JUDET: ROMANIA, 1999 TO 2003

JUDET	Per Capita Local Budget Expenditures (thousand ROL/student)					Per Capita Expenditure Indices									
						relative to country average					relative to capital Bucharest				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
COUNTRY TOTAL	324.96	464.43	5,935.21	8,077.06	10,563.87	1.00	1.00	1.00	1.00	1.00	0.12	0.11	0.17	0.16	0.14
North East	280.44	382.40	5,760.18	7,683.82	9,853.78						0.10	0.08	0.18	0.16	0.13
Bacău	293.52	474.81	6,015.23	8,386.19	11,001.12	0.86	0.82	0.97	0.95	0.93	0.09	0.10	0.16	0.15	0.14
Botoşani	259.08	303.03	5,433.82	7,537.50	9,397.78	0.90	1.02	1.01	1.04	1.04	0.10	0.08	0.16	0.13	0.12
Iaşi	320.43	383.19	5,857.32	7,350.67	9,520.48	0.80	0.65	0.92	0.93	0.89					
Neamț	281.18	350.86	6,203.11	8,101.86	9,746.63	0.99	0.83	0.99	0.91	0.90	0.11	0.10	0.16	0.15	0.13
Suceava	243.14	405.94	5,531.28	7,757.11	10,118.80	0.87	0.76	1.05	1.00	0.92	0.10	0.08	0.15	0.15	0.13
Vaslui	265.97	316.98	5,352.65	6,727.30	8,833.03	0.75	0.87	0.93	0.96	0.96	0.12	0.10	0.19	0.17	0.15
South East	296.74	409.73	5,446.55	7,504.70	9,806.72	0.91	0.88	0.92	0.93	0.93	0.13	0.13	0.15	0.14	0.13
Brăila	273.46	312.68	4,997.93	7,744.85	9,633.23	0.84	0.67	0.84	0.96	0.91	0.08	0.08	0.15	0.13	0.13
Buzău	333.98	408.94	6,470.43	8,824.33	10,655.37	1.03	0.88	1.09	1.09	1.01	0.13	0.14	0.17	0.15	0.14
Constanța	356.94	548.42	5,209.43	7,134.05	9,548.77	1.10	1.18	0.88	0.88	0.90	0.09	0.06	0.17	0.15	0.14
Galați	227.42	349.23	4,987.40	6,781.84	9,247.95	0.70	0.75	0.84	0.84	0.88					
Tulcea	353.24	561.85	5,689.31	7,503.59	9,878.37	1.09	1.21	0.96	0.93	0.94	0.11	0.11	0.17	0.16	0.14
Vrancea	234.49	236.83	5,672.34	7,564.98	10,263.40	0.72	0.51	0.96	0.94	0.97	0.11	0.11	0.20	0.18	0.16
South	301.34	470.78	5,781.34	7,873.90	10,024.92	0.93	1.01	0.97	0.97	0.95	0.11	0.11	0.17	0.16	0.14
Argeş	309.46	465.79	6,853.45	8,856.89	11,635.59	0.95	1.00	1.15	1.10	1.10	0.11	0.11	0.20	0.18	0.16
Călăraşi	285.27	584.48	5,049.06	7,348.78	9,211.02	0.88	1.26	0.85	0.91	0.87	0.10	0.14	0.15	0.15	0.13
Dâmbovița	300.49	419.79	5,138.61	7,470.95	9,663.21	0.92	0.90	0.87	0.92	0.91	0.11	0.10	0.15	0.15	0.13
Giurgiu	228.29	375.94	5,894.19	8,095.72	9,182.54	0.70	0.81	0.99	1.00	0.87	0.08	0.09	0.17	0.16	0.13
Ialomița	241.10	431.46	5,218.58	6,487.60	8,571.04	0.74	0.93	0.88	0.80	0.81	0.09	0.10	0.15	0.13	0.12
Prahova	388.72	548.00	5,806.43	7,739.20	10,173.45	1.20	1.18	0.98	0.96	0.96	0.14	0.13	0.17	0.15	0.14
Teleorman	225.12	397.69	5,922.94	8,500.51	10,082.35	0.69	0.86	1.00	1.05	0.95	0.08	0.10	0.17	0.17	0.14
South West	288.18	431.37	6,033.92	8,015.75	9,920.18	0.89	0.93	1.02	0.99	0.94	0.11	0.10	0.18	0.16	0.14
Dolj	274.68	424.92	6,242.44	7,884.32	9,487.22	0.85	0.91	1.05	0.98	0.90	0.10	0.10	0.18	0.16	0.13
Gorj	333.62	461.48	6,026.80	8,005.74	9,980.44	1.03	0.99	1.02	0.99	0.94	0.12	0.11	0.18	0.16	0.14
Mehedinți	240.09	369.73	6,186.56	8,127.68	10,391.68	0.74	0.80	1.04	1.01	0.98	0.09	0.09	0.18	0.16	0.14
Olt	302.46	486.52	5,709.33	8,131.35	10,300.20	0.93	1.05	0.96	1.01	0.98	0.11	0.12	0.17	0.16	0.14
Vâlcea	282.16	391.46	5,968.52	8,024.82	9,785.09	0.87	0.84	1.01	0.99	0.93	0.10	0.09	0.18	0.16	0.13
West	330.27	424.85	5,427.13	7,495.51	9,864.35	1.02	0.91	0.91	0.93	0.93	0.12	0.10	0.16	0.15	0.14
Arad	327.72	462.24	5,638.10	7,548.22	9,748.87	1.01	1.00	0.95	0.93	0.92	0.12	0.11	0.17	0.15	0.13
Caraş-Severin	299.32	435.76	6,934.94	7,566.36	8,701.36	0.92	0.94	1.17	0.94	0.82	0.11	0.11	0.20	0.15	0.12
Hunedoara	335.53	409.32	4,820.42	7,325.41	10,010.38	1.03	0.88	0.81	0.91	0.95	0.12	0.10	0.14	0.14	0.14
Timis	344.14	406.03	4,965.89	7,552.95	10,426.41	1.06	0.87	0.84	0.94	0.99	0.13	0.10	0.15	0.15	0.14

G.2. (CONTINUED)

JUDET	Per Capita Local Budget Expenditures (thousand ROL/student)					Per Capita Expenditure Indices									
						relative to country average					relative to capital Bucharest				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
North West	389.18	513.23	6,739.34	8,726.54	11,415.65	1.20	1.11	1.14	1.08	1.08	0.14	0.12	0.20	0.17	0.16
Bihor	320.63	533.54	6,347.17	7,685.80	10,508.21	0.99	1.15	1.07	0.95	0.99	0.12	0.13	0.19	0.15	0.14
Bistrița-Năsăud	413.64	540.64	6,821.82	9,249.48	11,845.78	1.27	1.16	1.15	1.15	1.12	0.15	0.13	0.20	0.18	0.16
Cluj	643.32	726.75	7,317.95	9,420.87	11,753.76	1.98	1.56	1.23	1.17	1.11	0.24	0.18	0.22	0.19	0.16
Maramureş	271.45	409.67	6,614.72	8,747.86	11,236.10	0.84	0.88	1.11	1.08	1.06	0.10	0.10	0.19	0.17	0.15
Sălaj	197.16	251.48	4,682.59	6,225.44	8,268.90	0.61	0.54	0.79	0.77	0.78	0.07	0.06	0.14	0.12	0.11
Satu Mare	469.43	569.44	9,611.22	12,625.33	17,428.33	1.44	1.23	1.62	1.56	1.65	0.17	0.14	0.28	0.25	0.24
Center	325.42	451.73	6,320.79	8,526.43	11,223.78	1.00	0.97	1.06	1.06	1.06	0.12	0.11	0.19	0.17	0.15
Alba	244.01	420.35	6,763.67	9,113.17	11,954.35	0.75	0.91	1.14	1.13	1.13	0.09	0.10	0.20	0.18	0.16
Braşov	364.32	480.03	5,299.98	7,370.91	10,293.32	1.12	1.03	0.89	0.91	0.97	0.13	0.12	0.16	0.15	0.14
Covasna	428.59	517.60	6,417.48	8,449.92	10,934.98	1.32	1.11	1.08	1.05	1.04	0.16	0.13	0.19	0.17	0.15
Harghita	293.43	489.15	7,017.77	9,124.46	11,595.23	0.90	1.05	1.18	1.13	1.10	0.11	0.12	0.21	0.18	0.16
Mureş	363.52	429.92	6,774.22	9,073.02	11,848.74	1.12	0.93	1.14	1.12	1.12	0.13	0.10	0.20	0.18	0.16
Sibiu	265.35	407.88	6,128.52	8,378.98	10,820.04	0.82	0.88	1.03	1.04	1.02	0.10	0.10	0.18	0.17	0.15
Bucharest	449.76	759.48	6,050.59	9,414.31	14,037.19	1.38	1.64	1.02	1.17	1.33	0.17	0.18	0.18	0.19	0.19
Capital Bucureşti	2,725.37	4,131.75	33,944.86	50,592.74	72,982.61	8.39	8.90	5.72	6.26	6.91	1.00	1.00	1.00	1.00	1.00
Ilfov	89.49	173.53	1,155.24	1,834.01	2,661.68	0.28	0.37	0.19	0.23	0.25	0.03	0.04	0.03	0.04	0.04

Note: Enrollment numbers do not include special education.

Sources: Authors' calculations based on local budget expenditure data from the Romanian Ministry of Public Finance and enrollment numbers from the National Institute for Statistics, 2004, Education in Romania: Statistical Data.

G.3. Average gross monthly wages by branch (2002)

Branch	Average Gross Wage (RoL/Person)	Ratio of wage for other branches to education wage
Education	**5,493,103**	
All employees	**5,334,968**	**1.03**
Agriculture, hunting and forestry	4,069,372	1.35
Fishing and fish farming	2,946,507	1.86
Industry	5,424,715	1.01
Construction	4,673,093	1.18
Trade	3,681,466	1.49
Hotels and restaurants	3,498,297	1.57
Transport, storage and communications	7,192,967	0.76
Financial intermediations	12,928,749	0.42
Public Administration and Defense	5,832,379	0.94
Health and Social Assistance	5,443,495	1.01

Source: Romania National Institute of Statistics, Statistical Yearbook, 2003.

G.4. Estimated net enrollment rates for basic education (1996 and 1998) by Charateristic[1]

Variable		1996			1998		
		Urban	Rural	Total	Urban	Rural	Total
Total		96.8	92.8	95.1	96.6	93.9	95.4
Individual characteristics							
Nationality	Romanian	97.4	93.4	95.8	97.7	95.2	96.7
	Hungarian	96.1	96.1	96.1	96.7	94.0	95.5
	Roma	70.8	74.3	72.7	69.3	73.7	71.8
Handicapped	Yes	n.a.	n.a.	n.a.	55.4	62.9	59.0
	No	n.a.	n.a.	n.a.	96.9	94.2	95.7
Age	7-10 years	96.0	93.9	95.1	95.1	92.9	94.1
	11-14 years	97.4	91.8	95.2	97.7	94.8	96.5
Gender	Male	96.7	92.2	94.9	96.9	93.4	95.4
	Female	96.8	93.4	95.4	96.2	94.4	95.4
Household characteristics							
Poverty Status	Not poor	97.6	95.2	96.8	97.9	96.2	97.4
	Poor	93.9	89.5	91.4	94.4	92.4	93.3
Extreme poverty status	Not poor	97.2	94.0	95.9	97.7	95.5	96.8
	Poor	89.2	85.0	86.5	89.0	89.9	89.6
Adult Equivalent Consumption Decile	Poorest	93.0	88.8	90.6	90.2	90.7	90.5
	2	96.3	93.0	94.7	97.7	95.3	96.6
	3	97.1	96.0	96.7	96.2	94.1	95.3
	4	98.4	95.0	97.2	98.3	96.1	97.5
	5	96.5	93.6	95.5	98.4	96.0	97.6
	6	97.7	96.1	97.1	98.7	96.3	97.9
	7	97.6	95.5	97.0	98.2	97.5	98.0
	8	98.9	95.3	98.0	98.1	95.5	97.6
	9	99.3	96.9	98.9	97.3	98.1	97.5
	Wealthiest	99.1	100.0	99.3	98.5	97.5	98.2
Highest educational level attained by parents present in HH	None or primary	n.a.	n.a.	n.a.	61.7	76.9	72.0
	Lower secondary	n.a.	n.a.	n.a.	95.6	93.6	94.2
	Vocational	n.a.	n.a.	n.a.	98.3	96.2	97.4
	Secondary	n.a.	n.a.	n.a.	97.1	95.7	96.5
	Post-secondary	n.a.	n.a.	n.a.	98.3	98.0	98.3
	University				99.0	98.5	99.0
Number of adults in household (individuals aged 15 and above)	1	98.5	92.8	96.9	95.0	97.2	95.6
	2	97.1	93.3	95.8	97.0	94.5	96.1
	3	97.2	93.1	95.5	96.9	93.7	95.5
	4	95.6	92.8	94.0	95.9	93.7	94.7
	5 or more	87.3	90.6	89.7	92.1	91.4	91.7
Size of household	2 or 3	97.0	92.9	96.1	97.2	95.1	96.7
	4	97.8	94.7	96.9	97.7	95.2	96.9
	5	97.9	93.6	95.8	97.9	95.3	96.6
	6 or more	92.5	91.2	91.7	90.7	91.9	91.5
Number of children ages 0-14 years	1	97.5	93.4	96.2	97.9	94.8	96.9
	2	97.2	93.6	95.8	97.1	94.3	96.0
	3	95.6	94.2	94.8	95.1	94.6	94.8
	4 or more	93.2	89.1	90.7	83.2	90.5	88.4

***Sources*:** Special analyses conducted by Lucian Pop, based on the Integrated Household Survey, National Institute for Statistics 1996, 1998.

[1] Estimates are for children 7 years or older at the beginning of the school year and younger than 15 years of age at the time of the survey.

G.5. Logistic regression effects of independent variables on non-enrollment

Independent Variables	Total	Girls	Boys	Rural	Urban	7-10 years old	11-14 years old
Nationality							
Hungarian	0	0	0	0	0	0	+
Roma	+	+	+	+	+	+	+
Other	0	0	0	0	0	0	0
Years of education among adults in household (more education decreases probability of non-enrollment)	-	-	-	-	-	-	-
Female	-	na	na	-	0	-	0
Rural	0	0	0	na	na	0	+
Percentage of agricultural workers in HH	+	+	+	+	na	0	+
Belongs to first consumption decile (dummy)	+	+	+	+	+	+	0
Average age of adults in HH	0	0	0	0	0	0	-
Other school-aged children in HH (dummy)	-	0	-	-	0	-	n.a.
Individual is the oldest child in the HH (dummy)	+	+	+	+	0	+	+
Number of people in HH	0	0	0	0	0	0	n.a.
Number of unemployed in HH	+	0	0	0	0	0	+
Year 1998 dummy	-	0	0	-	0	0	-
Number of inhabitants in town/village (thousands)	0	0	0	-	0	0	0
Age (curvilinear function)[1]	+	+	+	+	+	+	+
Marital status of head of HH							
cohabitation	+	+	+	0	+	+	+
divorced	0	0	0	0	0	0	0
widowed	+	+	0	0	+	0	+
single	0	0	0	0	0	0	0
Number of children younger than 5 in HH	+	+	+	+	+	+	+
Head of HH is non-agric self-employed (dummy)	+	+	+	+	+	+	+
The number of school-aged children in HH	na	na	na	na	na	na	0

***Sources*:** Special analyses conducted by Lucian Pop, based on the Integrated Household Survey, National Institute for Statistics 1996, 1998.

[1] The youngest (7 year olds) and oldest (13 and 14 year olds) in the age range for basic education are less apt to be enrolled.

G.6. Student performance on 1998 4th grade assessment

Variable	Language			Mathematics		
	Average Score	Standard Deviation	% of Maximum Score Possible	Average Score	Standard Deviation	% of Maximum Score Possible
Residence						
Urban	27.9	6.86	73.5	34.36	12.49	71.58
Rural	24.4	7.80	64.3	27.10	13.25	56.46
Multi-grade class	20.6	9.12	54.1	24.40	14.20	50.83
Gender						
Boys	25.0	8.20	65.9	29.90	13.92	62.29
Girls	26.6	7.58	70.0	31.52	13.24	65.67
Teacher qualifications						
Qualified	26.1	7.76	68.7	31.15	13.39	64.90
not qualified	21.7	9.14	57.2	24.36	15.13	50.75
Teacher experience						
over 4 years	26.3	7.77	69.1	31.49	13.46	65.60
Under 4 years	23.2	8.40	60.9	25.75	13.41	53.65
Total	**25.9**	**7.9**	**68.0**	**30.74**	**13.60**	**64.04**

Source: Romania National Assessment and Examinations Service (see annex table D).

G.7. Student language performance on 2000 4th grade assessment

Characteristic	Quartile			
	Q1	Q2	Q3	Q4
Residence				
Rural	16.6	17.6	28.9	36.9
Urban	3.7	7.0	17.2	72.1
Type of Instruction				
Multi-grade	15.6	15.9	30.1	38.4
Standard	9.4	11.8	22.0	56.8
School Resources				
No library or computers	17.3	18.5	28.0	36.2
Library	12.4	14.1	24.4	49.1
Library + computers	6.0	8.8	20.3	64.9
Gender				
Female	8.3	10.2	21.0	60.5
Male	10.7	13.7	24.8	50.9
Home resources				
Dictionary, books				
No	20.3	22.1	28.9	28.7
Yes	7.4	9.7	21.4	61.5
Computer in home				
No	10.3	13.2	23.9	52.6
Yes	9.0	6.9	17.5	66.7

Source: Romania National Assessment and Examinations Service.

G.8. TIMSS performance by subject and year for participating ECA countries

Country	Math			Science		
	1995	**1999**	**2003**	**1995**	**1999**	**2003**
Armenia			478			461
Bulgaria		511	476		518	479
Czech Republic	564	520		574	539	
Estonia			531			552
Hungary	537	532	529	554	452	543
Latvia	493	505	508	485	503	512
Lithuania	477	482	502	476	488	519
Macedonia, Rep. Of		447	435		458	449
Moldova		469	460		459	472
Romania	**482**	**472**	**475**	**486**	**472**	**470**
Russian Federation	535	526	508	538	529	514
Slovak Republic	547	534	508	544	535	517
Slovenia	541	530	493	560	533	520
ECA AVERAGE	522	503	492	527	499	501
Romania as % of ECA average	0.92	0.94	0.97	0.92	0.95	0.94

Source: IEA, 1997a, 1997b, 2000a, 2000b, 2004a, and 2004b.

G.9. Effects of family SES on TIMSS scores (1995)

Variable	Mathematics	Science
Mother's education		
Primary only	462	474
University	525	528
Educational resources in home		
0-10 books	459	467
26-100 books	476	483
>200 books	523	518

Source: IEA, 1997a and 1997b.

G.10. Marginal Effects of Education on the Probability of Becoming Unemployed: Romania, 2000-2002

Education	Specification 1	Specification 2*	Specification 3**
Individuals between ages 15 and 23			
No schooling			
Primary	-0.022	-0.004	
	(2.37)	(0.38)	
More than primary	-0.032	-0.002	
	(2.21)	(0.23)	
Individuals between ages 24 and 64			
No schooling			
Primary	-0.003	-0.002	-0.003
	(1.01)	(0.70)	(0.75)
Middle	-0.006	-0.005	-0.005
	(1.95)	(1.62)	(1.63)
Professional	-0.006	-0.005	-0.004
	(2.02)	(1.61)	(1.45)
High School	-0.009	-0.008	-0.007
	(2.90)	(2.53)	(2.32)
Post-secondary vocational	-0.011	-0.010	-0.009
	(4.78)	(4.36)	(3.86)
Higher education	-0.011	-0.010	-0.009
	(4.97)	(4.41)	(3.91)

* Also included work status in the first wave of the survey.
** Also includes ownership form.

Source: World Bank 2003, tables 2 and 3.

ANNEX H. BANK DOCUMENTS REVIEWED

Document #	Date	Name
9577	21-Oct-91	Accelerating the Transition: HR Strategies
9497	03-Dec-91	The Challenge of Transition (Vol I & II)
10558	01-Apr-92	Romania: Human Resources and the Transition to a Market Economy
11931	16-Mar-94	SAR: Education Reform Project
15525	26-Aug-96	Reform of Higher Education and Research Project
16462	01-Apr-97	Poverty and Social Policy (Vol I & II)
361	1-Apr-97	WTP: Trend in Education Access and Financing during the Transition in Central and Eastern Europe
16559	09-May-97	CAS
16555	29-Jul-97	SAR: School Rehab Project
17743	26-Jun-98	Public Expenditure Review (Vol I & II)
Book	01-Jun-00	Hidden Challenges to Education Systems in Transition Economies
22097	1-Mar-01	WBI: Decentralizing Education in Transition Societies
22180	22-May-01	CAS
22857	1-Aug-01	Romania: Secondary Education and Training
2763	1-Jan-02	Capacity Building in Economics: Education and Research in Transition Economies
23492	16-Jan-02	Local Social Services Delivery Study (Vol I & II)
24756	01-Aug-02	Building Institutions for Public Expenditure Management: Reforms, Efficiency and Equity
24553	22-Aug-02	ICR: Education Reform Project
24353	1-Oct-02	Education Policy Note
25101	4-Apr-03	PAD: Rural Education Project
26225	18-Jun-03	OED PPAR: Education Reform and Reform of HE and Research
26169	30-Sep-03	Poverty Assessment (Vol I & II)
	1-Dec-03	Reshaping Education for an Open Society in Romania: 1990-2000
28324	26-Feb-04	World Bank Group in South Eastern Europe: Regional Framework Paper
29123	01-Jun-04	Restucturing for EU Integration (Vol I & II)
27695	21-Jul-04	ICR: Schools Rehab Project
	31-Aug-04	QAG Country Lending Enhancement Review
	19-Jan-5	OED Draft Country Assistance Evaluation

ANNEX I. LIST OF THOSE INTERVIEWED

Individual Interviewed	Position
Alecu, Dumitru	Ministry of Finance
Crisan, Alexandru	Executive President, Center Education 2000+
Cornea, Aurel	President, The Federation of the Free Unions in Education (FSLI)
Iosifescu, Serban	Director, Education Management Department, Institute for Educational Sciences
Litoiu, Nicoleta	Rural Education Project, Ministry of Education and Research
Masariu, Mioara	Ministry of Finance
Mihail, Roxana	Director, Research Department, National Assessment and Examination Service
Moarcas, Mariana Doina	Operations Officer, Romania Resident Mission, World Bank
Neascsu, Ioan	Director of General Directorate for Assessment, Prognosis, Strategies, and Programs for pre-university education
Noveanu, Gabriela	Director, TIMSS, Institute for Educational Sciences
Panduru, Filofteia	General Director, Romania National Institute of Statistics
Penescu, Luiza	Publisher
Penescu, Mihail	Publisher
Petrescu, Cecilia Paloma	State Secretary, Ministry of Education and Research
Petrescu, Roxana	Ministry of Finance
Pop, Viorica	TIMSS
Postavaru, Nicolae	Director, School Rehabilitation Central Project Management Unit, Ministry of Education and Research
Preoteasa, Liliana	General Director, pre-university education, Ministry of Education and Research
Sandi, Ana Maria	Lead Operations Officer, Romania Resident Mission, World Bank
Sarivan, Ligia	Curriculum expert, Institute for Educational Sciences
Stoica, Adrian	Director, National Assessment and Examination Service
Velter, Tiberiu	Director, Rural Education Project, Ministry of Education and Research
School 1-8	For each school: school principal, teachers, parents, and students

ANNEX J. INTERVIEW GUIDANCE QUESTIONNAIRE FOR ROMANIAN INTERVIEWEES

Introductory note. This instrument is mainly an outline. The interviewer should fill in the gaps and adjust the content to the interviewee. S(he) should avoid questions that provoke a yes or no reply.

1. **Objectives of the interview** (as an introduction to the interview)
   a. The case study: to help evaluate the impact of the World Bank's activities on Basic Education from 1990 to present.
   b. Briefly present OED and indicate the recipient of the case.
   c. Assure respondent of the confidentiality of all of his/her responses to our questions. Neither names nor positions of those interviewed will appear in the document.

2. **"Position" respondent relative to basic education reform, to the GoR, and to the Bank.** In what capacities have you dealt with basic education? At what dates? What roles have you played relative to the GoR? The World Bank?

3. **Events history.** When you think about the evolution of Romania's education policy between 1990 and today (2005), what do you see as the important events or milestones?

4. **Bank's intervention in basic education**
   a. What do you see as the Bank's strategy in the country since 1990 in relation to basic education? What assistance has it provided?
      - Bank-country dialogue (including adjustment/MOF relationship)
      - Bank-sector dialogue
      - Major Bank interventions (projects, components, technical/policy analyses—e.g., sector work, policy advice)
   b. Do you see the Bank's assistance as having been relevant to Romania's needs?

5. **World Bank and other donors**
   a. What other donors have been involved in basic education?
   b. Was their involvement different than that of the Bank's? If so, how?
   c. Compare the relationship between GoR and the donors in basic education and that between GoR and the Bank.
   d. How would you estimate the relative funding of those donors compared to the Bank's?

6. **Change: what kind, how much, who made change happen?** Given what you know about Romania's education reforms, please use this table to tell us what kinds of changes you think have occurred in basic education in Romania, how big the changes have been, and the roles of the Romania, the World Bank, and other donors in those changes.

Question	Government Policy & Capacity	Delivery of Education Services	Household Demand for Education	Outputs and Outcomes
Has change occurred in any of these 4 areas? What kind of change?				
When did change occur: early (1990-1995), middle (1996-2000), late (2001-2005)?				
On a scale of 1-5, with 5 being high, how much change do you think occurred?				
What were the main challenges and obstacles to change?				
Who were the champions of change? Who were the winners from change? Who were the losers?				
On a scale of 1-5, with 5 being high, how much did Romanian policymakers and technical staff contribute to this change?				
On a scale of 1-5, with 5 being high, how much did the Bank contribute to this change?				
On a scale of 1-5, with 5 being high, how much did the donors contribute to this change?				
To what extent would the changes have taken place in the absence of Bank support?				
Do you think that the change is sustainable? If not, why not?				

7. **Political economy of change.** How have changes in the wider political context affected changes in policy, institutional capacity, delivery of services, household demand, and outputs/outcomes of basic education? For example: economic crises? Big changes in the political parties in power? Natural disasters?

8. **Policy and program formulation.** Who has been at the table when policies and programs for basic education were being formulated,? Only members of the central Ministry of Education? NGOs? Communities? Parents? Between 1990 and 2005, have the participants in policy and program formulation changed?

9. **Lessons learned.** If the World Bank wanted to be more effective in supporting reform of basic education in Romania, what lessons do you think it should learn from its fifteen years of work here?

ANNEX K. INTERVIEW GUIDANCE QUESTIONNAIRE FOR BUCHAREST RESIDENT MISSION STAFF

State of Play

1. If you had to pick three major education that have been achieved in Romania between 1990-2005, what would they be? Do you expect these reforms to be sustained?
2. If you had to pick three major reforms that are in progress, what would they be? What obstacles to you see to the successful implementation of these reforms?
3. If you had to pick three areas that need reform but where reform has not yet started, what would they be? Why has the Romanian Government not acted on these issues yet?

Bank and Donor Contributions

4. What do you see as the Bank's contribution to achieved reforms? To reforms under implementation? To pushing for needed reforms that the Government has yet to embrace? What do you see as the contributions of other donors for each of these three categories?
5. Do you think that Romania would be where it is today in education if the Bank had not been involved?
6. Do you think that the Bank has missed opportunities to contribute as much as it might have? Think broadly here--e.g., could the rural education project have benefitted from an effective rural strategy? Have PREM's non-lending activities (e.g., PERs, CEMs, Poverty Assessments) supported education as effectively as they might have? If not, what do you see as the costs for the education sector?

Lessons Learned

7. Based on the Bank's experiences with Romania since 1990, are there lessons for us to learn about how to support Romanian education --especially basic education--more effectively?