## European Expert Network on Economics of Education (EENEE)



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# Why Should We Care About the Costs and Benefits of Education?

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Resources, whether public or private, are always scarce. Available resources can be used in different ways to reach the same goal. And saved resources can also be used for a plethora of alternative aims. Ensuring efficient and effective use of resources is thus an important issue of public policies, including the area of schooling and education. EU Member States should thus more often and more carefully use cost-benefit analysis to ascertain that public and private resources devoted to education address real problems and societal needs in the best way.

#### **COSTS AND BENEFITS MATTER**

In business, cost-benefit analysis and cost-efficiency analysis are commonly used tools. Before investing in new machinery or new technology or building a new warehouse, the firm uses cost-benefit analysis to compare the expected costs with the expected benefits of a project. If the overall benefits sufficiently exceed the overall costs, the firm will likely go ahead with the project. If the costs are greater than the benefits, the firm does not engage in the particular project. If the benefits are difficult to quantify, the firm may use cost-effectiveness analysis seeking the least costly approach to obtain a desired benefit.

#### SPECIFIC FEATURES OF HUMAN CAPITAL

The above tools can and should be usefully applied also in the area education. Investment in skills, i.e. human capital, is in many respects similar to investment in physical capital. But there are also important differences related to the way costs and benefits are conceptualised and measured. In particular:

- Human capital cannot be separated from the human body and cannot be resold in the market as physical capital.
- Throughout a person's entire life, human capital is closely linked to many phenomena other than market

work, such as household production, leisure, health, socialising and other activities.

- It is more difficult to borrow privately for investment in human capital because of the lack of collateral.
- Human capital has strong positive spillover effects on other members of society.
- Investment in human capital is risky from an individual's perspective. While large institutional investors can easily diversify the risk they take when investing in physical capital, the scope for diversification at the level of individuals is quite limited.
- Human capital is much more difficult to measure because its market price (i.e. wages and earnings) is a less reliable proxy of its actual value. Moreover, human capital leads to numerous outcomes that cannot be monetized.

#### **PROBLEMS AS USUAL**

A cost-benefit analysis for almost any educational measure has to deal with difficulties related to the complexity of the matter such as proper measuring of costs and benefits, lack of information and data, uncertainty about outcomes and affected groups, hard-to-predict unintended side effects, scaling-up of small pilot program experience including general equilibrium effects.

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No doubts that cost-benefit analyses have limitations. Viewing education as investment does not deny its pedagogical, cultural or consumption attributes, which should also be considered when analysing the role of education. But cost-benefit analyses offer a complementary viewpoint provided by economic analysis, to be used simultaneously with other important insights, in order to enrich policy decisions regarding education and schooling in the never-ending effort to improve people's lives. There are always aspects that can be

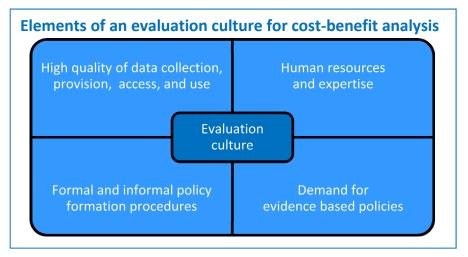
resolved only through policymakers' subjective judgments or through a process of politically revealed preferences. Nevertheless, wider and regular use of good quality cost-benefit analysis would surely be a step in the right direction to improve policy-making in the area of education within EU Member States.

#### **FOSTERING INFORMED POLICYMAKING**

Use of cost-benefit analyses in the sphere of schooling fosters informed policymaking. Applying the principles of cost-benefit analysis to a specific education policy or programme exercises desirable pressures to define policy objectives clearly and at an early stage of the policy design. However, the interaction of educational treatment with environmental conditions specificities limits the transferability of cost-benefit analyses not only from one country to another but also from place to place within a country. Obstacles to replicate or generalise findings imply that institutional and expert capacity has to be in place to produce costbenefit analyses matching ongoing innovations of educational policies.

Regular use of good quality cost-benefit analysis is impossible without a proper evaluation culture (see Figure). In particular, it requires that (a) evidencebased policies are institutionalized and built into standard administrative processes. (b) There is among higher levels public awareness

EENEE Policy Brief 3/2014



administration and society as a whole that evidencebased policies are necessary for the successful implementation of education programmes. (c) There is sufficient intellectual, information and data capacity for the use of evidence-based policies. And (d) there is sufficient expert capacity in a country.

Admittedly, there are cases when elaboration of a solid cost-benefit analysis turns out to be constrained by methodological and data difficulties. However, the process of cost-benefit analysis itself can be very useful. It can help in clarifying what types of costs and benefits are included or neglected from consideration, what their expected time structure is, which stakeholders will incur the costs and benefits, which subgroups are expected to benefit the most, whether and how a pilot programme experience could be scaled-up, and what side effects and unintended effects should be taken into account. All this helps promoting clarity and transparency in policymaking.

#### RISKS OF WASTED SCARCE RESOURCES

Despite its obvious fruitfulness, the use of cost-benefit analysis in EU Member States in the area of education and schooling is still irregular and in many countries still quite rare. This implies risks that public and private resources devoted to education are wasted and that educational reforms are implemented without sufficient prior (ex-ante) and ex-post analysis poorly reflecting real problems and societal needs.

For more details see: Daniel Münich, George Psacharopoulos (assisted by Jan Straka), Mechanisms and Methods for Cost-Benefit / Cost-Effectiveness Analysis of Specific Education Programmes. EENEE Analytical Report No. 19, March 2014, http://www.eenee.de/dms/EENEE/Analytical\_Reports/EENEE\_AR7.pdf.

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PAGE 2

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