European Parliament

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B
STRUCTURAL AND COHESION POLICIES

Agriculture and Rural Development

Culture and Education

Fisheries

Regional Development

Transport and Tourism

RESEARCH FOR CULT COMMITTEE - EVALUATION OF EDUCATION AT THE EUROPEAN LEVEL

STUDY

EN

2016

RESEARCH FOR CULT COMMITTEE - EVALUATION OF EDUCATION AT THE EUROPEAN LEVEL

STUDY

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

EDUCATION AND CULTURE

RESEARCH FOR CULT COMMITTEE - EVALUATION OF EDUCATION AT THE EUROPEAN LEVEL

STUDY

Abstract

This study addresses the question of similarities and differences of the education evaluation approaches of the EU and the OECD with the aim of exploring the possibilities of further developing the education evaluation system and the related policies of the EU. The study analyses the existing EU level educational evaluation practices and policies with a special focus on the use of educational indicators and the assessment of pupil competences. On the basis of the analysis a number of recommendations have been formulated for possible future EU level policies and actions.

CONTENTS

LIST OF ABBREVIATIONS

AEA   Association for Educational Assessment – Europe

AHELO   Assessment of Higher education. Learning Outcomes (OECD programme)

CRELL   Centre for Research on Education and Lifelong Learning

CSR   Country-specific recommendations

DG EAC   Directorate General for Education and Culture

EACEA   Executive Agency Education, Audiovisual and Culture

EENEE   European Expert Network on Economics of Education

EILC   European Indicator of Language Competence

ESLC   European Survey of Language Competences.

ELIG   European Learning Industry Group

EPNoSL   Policy Network of School Leadership

EQF   European Qualifications Framework

EUROSTAT   The statistical authority of the European Commission

ICT   Information and Communications Technology

IEA   International Association for the Evaluation of Educational Achievement

INES   Indicators of Education Systems (OECD programme)

JAF   Joint Assessment Framework

KeyCoNet   Key Competence Network on School Education

LLL   Lifelong Learning

NESSE   Network of Experts in Social Sciences of Education

OECD   Organization for Economic Cooperation and Development.

OMC	Open Method of Coordination
PIAAC	Programme for the International Assessment of Adult Competencies
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PLA	Peer Learning Activities
SGIB	Standing Group on Indicators and Benchmarks
SICI	Standing International Conference of Inspectorates
TALIS	Teaching and Learning International Survey
TIMSS	Trends in International Mathematics and Science Study
TWG	Thematic Working Groups
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UOE	UNESCO/OECD/Eurostat (data collection)

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

Background and aim

Since the middle of the last decade the improvement of efficiency and effectiveness of education systems has become a major strategic goal of the European Union. Strengthening assessment and evaluation has been increasingly seen as a key instrument to achieve this goal. The questions of (1) what role the European Union should play in developing national educational evaluation systems, (2) what kind of assessment and evaluation instruments it should develop and implement through direct community level programmes or actions and (3) how the EU should cooperate in this area with major international players, such as the OECD, are now among the major strategic questions of the education and training sector at the level of the European Union. This study, prepared at the request of the Committee on Culture and Education of the European Parliament, aims at exploring the possibilities of further developing the system of educational evaluation in the European Union with a special focus on the cooperation between the EU and relevant external agencies, especially the OECD. The targeted audience of the study is the community of national and European policy experts and decision makers.

Main conclusions

The European Union has had a long and relatively rich history of supporting member states and cooperation between them in the area of educational evaluation. This has been reinforced by the emergence of education policy coordination mechanisms following the adoption of the Lisbon agenda in 2000 and by the use of measurable indicators for policy coordination, as well as by the increasing stress on evidence based policy making. The analysis provided by this study suggests that the development of European cooperation in the field of educational evaluation could follow two major lines in the future. One is the further development of already existing European level assessment and evaluation tools and instruments, and the other is providing more support to the member states to develop further their own national educational evaluation systems.

Most of the data supporting policy coordination, and particularly the instruments used to produce them, can be used also for educational evaluation purposes. This makes the European Commission a major actor in educational evaluation in Europe even if this has not been the primary goal and if the responsibility for operating educational evaluation systems rests with the member states. There is a permanent pressure on the European Commission to improve continuously the instruments and tools it uses for policy coordination and, indirectly, for educational evaluation. **This makes necessary both the development of internal capacities and an intensive cooperation with external players, such as international organisations active in this area.** The scarcity of resources and also the increasing burden on member states related to domestic data collection, necessitate the establishment of a good division of work between internal and external agencies.

The most important partner of the EU in the field of developing indicators, collecting data and analysing them is the OECD. There is already an enhanced cooperation between the European Commission and the OECD in the field of indicator development and policy evaluation/analysis, and it can be expected that this cooperation will become even more intensive in the future. After two decades of cooperation **in the field of developing and using indicators to evaluate the performance of national education systems there**

are more similarities than differences between the approaches used by the EU and the OECD, in spite of the fact that the latter is a global organisation with several of its most influential members being non-European states, and in spite of the different political environment in which the OECD and the EU institutions operate.

The launching of major new, regular surveys at the level of the EU, based on school, teacher or student level data collection (such as, for example, the PISA or the TALIS survey of the OECD) and covering each member state seems not to be a realistic expectation because of high costs and the inherent risks associated with conceptualisation, the development of appropriate measurement instruments and willingness or readiness of member states to participate in such surveys. **Such surveys can be justified when the area to be measured is of particularly high political importance (such as, for example, the development of European key competences for lifelong learning or the fight against early school leaving and for inclusive education) and when the distance between the specific European needs and the already existing external surveys is too large**. The examples of such surveys show that they can be successful only if these conditions are met, and, as a consequence, a sufficient number of member states might be expected to support the initiative. On the basis of existing initiatives and experiences and taking the relevant political priorities into account **entrepreneurial competences is the area where a European survey based on school and pupil level measurement seems to be the most promising**.

In certain areas the EU has already provided policy support for the development of national educational evaluation systems which has demonstrated that consensus can be created at expert level through relevant pilot projects and this can lead to common policy actions in the field of educational evaluation as an area of high level political sensitivity.

Member states can be supported to develop further their national educational evaluation systems through the provision of financial and technical assistance to develop new assessment and evaluation instruments at European level. In this field the European Union has not yet become a major actor: the only major exception is the successful survey of language competences. **There might be a major development potential in this area if the EU creates appropriate frameworks in which national technical expertise in educational assessment and evaluation can be continuously shared and developed further**.

Recommendations

On the basis of the analysis a number of specific recommendations have been formulated by this study (for a more detailed elaboration of the recommendations see the last chapter of this document):

- The European Commission should initiate a systematic reflection and debate on educational evaluation

- The development of a European educational evaluation policy should take into account the multilevel and diverse nature of educational evaluation

- The European Commission should pursue the indicator development work preferably in those areas which are not yet covered by other international organisations (such as the OECD or the IEA)

- The development and the use of indicators for policy coordination purposes should be conceived so that, if possible, they could also contribute to the development of the educational evaluation system at European level

- Synergies between the development of national educational evaluation systems and the implementation of common European policy priorities in education should be strengthened

- The further development of European level direct measurement tools should be guided by the strategic considerations, endorsed both by the Parliament and the Council, such as the development of transversal competences

- The creation of a European survey based on direct school and pupil level data collection in the field of entrepreneurial competences should be considered

- In each relevant competence area specific approaches are required based on earlier development work and the experiences of earlier pilot initiatives

- The European Commission should coordinate better the activities of those OECD Member States which are members of the European Union

- The European Commission should continue to support the participation of non-OECD member countries in OECD programmes with a potential to produce good quality data for relevant existing or possible EU indicators

- The cooperation between the European Commission and the OECD should be framed by a regularly renewed formal agreement endorsed by the relevant political decision making bodies

- The member countries of the EU should be continuously supported in their efforts to establish and operate comprehensive evaluation and assessment frameworks in line with the relevant European education policy priorities and with the relevant OECD recommendations

- The evaluation of national assessment and evaluation systems and policies could be included into the regular monitoring of the performance of national education systems

- The European Commission should support initiatives aimed at introducing new innovative solutions into national educational evaluation systems in the member states

1. EVALUATION OF EDUCATION AT THE EUROPEAN LEVEL

1.1. Aims and background

As a recent OECD publication on global education policy trends has stressed "*evaluation and assessment in education have become a key policy issue*" in all OECD countries as they make efforts to improve student learning outcomes and the efficiency and effectiveness of their school systems (OECD, 2015a). At the same time an analysis of the implementation of the strategic framework for European cooperation in education and training (ET 2020) by the European Commission stated that, according to recent mapping of tools to promote efficiency and effectiveness in European education systems, "*most Member States do not focus enough on the efficiency of their education policies and programmes*" and "*only few European countries regularly measure efficiency*" (European Commission, 2015). The question of what role the European Union should play in developing national educational evaluation systems, what kind of assessment and evaluation tools it should develop and implement through direct community level programmes or actions and how the EU should cooperate in this area with major international players, such as the OECD, are now among the outstanding strategic questions in the education and training sector.

Since the middle of the last decade the improvement of efficiency and effectiveness of education systems has become an important strategic goal of the European Union and strengthening assessment and evaluation has been increasingly seen as a key instrument to achieve this goal. The use of evidence to improve the impact of costly education policy interventions – such as those targeted at reducing early school leaving – is now on way to become a basic norm in the EU which has been increasingly supporting the development of the systems of educational assessment and evaluation of its member states. This is illustrated, among others, by setting the "assessment of transversal skills in basic and secondary education" as one of the priority areas of Erasmus+ Key Action 3 ("Support for policy reform").

This study, prepared on the request of the Committee on Culture and Education of the European Parliament[1] aims at exploring the possibilities of further developing the system of educational evaluation in the European Union with a special focus on the cooperation between the EU and the OECD. The study has been based on the analysis of the relevant documents and information publicly available and on the relevant databases and indicators of the OECD and the EU, including the main statistical publications. The author has also used his personal experiences as a member of various OECD education related bodies, especially chairing the Group of National Experts of the Thematic Review on 'Evaluation and Assessment" of the OECD between 2010 and 2013. The study also relies on a number of informal discussions with leading figures in the area of education assessment and evaluation, and on informal consultations with European Commission officials.

The aim of this study is to provide input to policy discussions on the possible role of the European Union in the field of educational evaluation. The targeted audience of the study is the community of national and European policy experts and decision makers. The recommendations are targeted mainly to European level education policy decision makers but they might be considered also by policy makers or educational evaluation experts at member state level.

In accordance with the terms of references the study has addressed two *general* questions:

> What are the main similarities and differences in evaluation of education systems and policies within the EU and at the OECD level?

> What is the feasibility to further develop the evaluation of education systems and policies at the European level in a more comprehensive way?

It has also been seeking answers to the following *specific* questions:

> To what extent do the existing EU level evaluation procedures, with a special focus on the use of educational indicators, support the evaluation of outcomes of education systems and policies in the member countries, with an emphasis on pupil outcomes and early school leaving?

> What indicators or processes are available to evaluate the outcomes of education systems and policies in the member countries (including variables that are not strictly statistical) and how the surveys of OECD and OECD indicators can support the evaluation procedures of the EU? Is there room and scope to further develop the system of indicators at the EU level, with a special focus on implementing common European policies?

> What could be the commonly shared elements Member States may refer to in order to analyse the results and processes of their respective educational systems?

The next chapter of the study on systems and policies of educational evaluation defines the notion of educational evaluation, presenting the key components of educational assessment and evaluation systems. Referring to a recent OECD study it presents the assessment of student learning outcomes and the evaluation of schools, teachers, school leaders, programs, policies and whole national/regional education systems as key components of educational evaluation systems. This chapter also clarifies the complementary nature of community and member state level roles and responsibilities in the field of educational evaluation.

The following main chapter presents the key elements of what is described as the educational evaluation system of the European Union from the perspective of the research questions of this study. The first section of this chapter on the emergence of the European system of educational evaluation demonstrates that since the adoption of the Maastricht Treaty, and particularly since the launching of the Lisbon strategy the European Union has developed an advanced framework of policies and actions which can be interpreted as an educational evaluation system, though the different pieces of this framework have not been created with an explicit educational evaluation purpose. The most important function of this framework has been policy coordination and the various evaluation instruments developed in this framework (especially indicators and peer monitoring) have been supporting the emerging new "post-Lisbon governance model" with the Open Method of Coordination in its centre. This section puts a special emphasis on the implications of the new European governance mechanisms emerged following the 2008 financial and economic crisis for the development of educational evaluation at European level, especially the European Semester with its specific education sector dimensions, the voluntary peer review processes focusing on the implementation of education sector related country-specific recommendations and the strengthening of the strategic focus of the Thematic Working Groups (TWGs) supporting the implementation of the ET2020 strategy.

---

[1] See tender procedure and terms of reference No. IP/B/CULT/IC/2015-130.

The next section of the main chapter analyses the relationship between educational evaluation and the use of indicators and benchmarks demonstrating that several of the indicators developed for the evaluation and the peer monitoring of the policy performance of the member states are based on data that can be used also for educational evaluation purposes. The main function of this section is to demonstrate that even if educational evaluation is basically a member state responsibility the creation of the post-Lisbon policy coordination framework has resulted in the emergence of a relatively advanced system of educational evaluation at European level. This section provides an analysis of factors determining preferences for using evaluation mechanisms or instruments developed internally (within the EU, either at community or member state level) or externally (by agencies outside the EU, such as the OECD), also proposing an analytical model to better understand these factors.

The third section of the main chapter on the educational evaluation system of the European Union is focussing on one particular segment: surveys based on direct school/pupil level data collection. On the basis of an analysis of European level programs aimed at direct school/pupil level collection of data this section demonstrates the existence of European level capacities to realise surveys similar to those implemented by the OECD or by other international agencies having long-standing experiences in designing and implementing international educational assessment and evaluation programs. A more detailed presentation of two specific cases (surveys to measure language skills and learning to learn skills) aims at revealing the opportunities and challenges that efforts to establish direct school or student level data collection might face.

The last chapter is focussing on the question of EU-OECD cooperation in the field of educational evaluation. This section, relying on evidence from the relevant literature, includes also some historical details in order to demonstrate that this cooperation has been developing in a challenging policy environment and might still face challenges. We demonstrate in this section that cooperation between the EU and the OECD in the field of educational evaluation, including the regular and systematic use of the results of OECD surveys is necessary for making educational evaluation at European level efficient, effective and of high quality.

1.2. Systems and policies of educational evaluation

Since the goal of this study is to analyse the system of educational evaluation at the level of the European Union and to recommend actions to improve this system it is necessary to make it clear what we mean by "system of educational evaluation".

This study basically follows the approach and the definitions adopted by the thematic review of OECD on „*Evaluation and Assessment Frameworks for Improving School Outcomes*" conducted between 2009 and 2013 with the active participation of several EU member countries. As the synthetises report of this review has stressed, the notion of "educational evaluation" used to be traditionally associated with the assessment of the performance of students but in recent years countries developed „*more comprehensive evaluation and assessment frameworks*", often allocating more resources to evaluation components other than student assessment (OECD, 2013).

The OECD review originally intended to cover four basic *objects* of evaluation: *students*, *teachers*, *schools* as institutions and *systems*. Later the evaluation of *school leaders* was added as a fifth area, given the generally recognised strategic role of leadership and its

impact on the performance of education systems. During the review process two further areas have been identified as missing from the original categorisation: the (impact) evaluation of *policies* or policy interventions and the evaluation of *curricular objects* such as curricular programmes, textbooks or teaching materials. These two additional objects were included into the broader category of system evaluation. Besides the term *evaluation* the OECD review used two other terms: *assessment* (especially when referring the measurement of student performance) and *appraisal* (especially when referring to the evaluation of people, that is, teachers or school leaders).

Perhaps the most central term of the OECD review was "*evaluation and assessment framework*", which can be interpreted as being more or less synonymous with what we call here "*system of educational evaluation*". This is a complex ecosystem of many components, such as actors, institutions, objects, actions and processes which all together constitute a dynamic whole. In this study we tend to use the term "system of educational evaluation" but we always keep in mind the complexity of this system and the dynamic relations between its components as it appeared in the synthesis report of the OECD review (see *Figure 1*). As an Irish lecture presented at the Presidency Conference entitled "Better Assessment and Evaluation to Improve Teaching and Learning" in 2013 formulated "*the most significant aspect of the OECD work is the proposal that countries ought to view arrangements for evaluation and assessment as a structured and planned system*" and „*in the realm of evaluation and assessment, we need to examine how best all the elements we use can be planned and deployed in a coherent way*" (Hislop, 2013).

Figure 1: The components of the evaluation and assessment framework

Source: (OECD, 2013)

The notions of "evaluation and assessment framework" and "system of educational evaluation" also imply the existence of deliberate *policies* (or policy interventions) trying to modify this framework/system or to improve its operation. This is what we call *educational evaluation policies*. In the analytical framework used by the OECD review the governance of assessment and evaluation systems appears as a key component. When such systems

emerge the need to assure their internal coherence and their appropriate operation becomes a key policy goal. Otherwise assessment and evaluation systems might produce inappropriate feedback and fail to contribute to the improvement of the quality of teaching and learning and to improve student outcomes. Well designed and implemented educational evaluation policies assure, among others, the continuous development of professional capacities for assessment and evaluation and also the development of an evaluation culture in which not only reliable quantitative and qualitative data are produced for feedback but they are also appropriately used by the relevant actors, including administrators, schools, teachers and clients, that is, the users of educational services.

Policies of educational assessment and evaluation are facing high level complexity, and this complexity is particularly high when policies are conceived at and implemented from supranational level. First, assessment and evaluation is a multilevel function: it occurs not only at national level, but also at the level of local districts, individual schools, classrooms, teachers and pupils. Policy interventions may be targeted to all these levels and it is always a major question at which level interventions are the most effective. For example, if student portfolios are particularly appropriate tools to measure student performance in complex cross-curricular areas, as suggested by a relevant analysis of the European Commission (2012a; 2012b), the policy intervention should be targeted at changing assessment practices at school and classroom level. This might be different from the assessment of disciplinary knowledge in well-established subject areas which allows the use of standardised test administered by national levels evaluation agencies. The development of the European Language Portfolio[2] is a good example of a European level agency creating an assessment tool and related approaches later implemented by national agencies through actions aimed at changing the behaviour of teachers at school level.

Second, each area of evaluation is connected to specific policy areas and requires specific approaches, and evaluation-related policy interventions can support area-specific policy goals. The assessment of student learning outcomes can, for example, support the implementation of curriculum policy goals. Teacher evaluation can be used for human resource management, affecting employment, remuneration or promotion. School evaluation can be used to assure legal compliance or to promote effective resource management. Policy and programme evaluation can be used to improve effective governance or to regulate textbook markets. Policies of assessment and evaluation, therefore, must be sensible to all these different policy areas in order to effectively support specific priorities in each of them.

The multilevel and diverse nature of assessment and evaluation has far-reaching implications on how we think about the possibilities of a European policy of educational evaluation. There might be many different options for European action in this area, and, as we shall see in the next section, there have already been many relevant programmes and actions which could provide a basis for such a policy. **This requires, however, a highly sophisticated policy model taking into account not only the complexity of educational evaluation systems but also the complexity of European cooperation in the field of education**.

Most developed countries, practically all EU member countries, seem to be committed to develop and to maintain some kind of educational evaluation and assessment framework and to make it work as a coherent system in order to improve the effectiveness of teaching and learning in their schools. And, as illustrated by a recent Eurydice report (European Commission/EACEA/Eurydice, 2015), most of them have, at least implicitly, educational

evaluation policies as a whole of measures and actions that intend to improve the operation of their educational evaluation system.

It is worth mentioning that although the countries participating in the OECD evaluation and assessment review[3] have reached a basic consensus on the terms and the objects of educational evaluation there were important discussions behind this consensus showing that the notion of educational evaluation and the scope of its meaning is still in a state of dynamic change in function of national school cultures and political or academic orientations.[4] The high level active participation of a large proportion of EU member countries in this exercise makes it legitimate, however, to follow the approach and the definitions adopted in this review.

It is important also to mention that most educational assessment and evaluation systems are in a state of continuous change: new approaches and technologies are emerging, and one of the goals of national educational evaluation policies is, in fact, to encourage innovations making these systems more effective in improving student outcomes. For example, an important line of development is related with the measurement of "hard-to-measure" skills or competences, such as complex cross-curricular or transversal skills, including "soft skills" such as cooperative, non-cognitive and emotional competences (OECD, 2015b). This is a strategic line because most of these competences are highly valued in the modern knowledge economy and the fact that they are rarely measured may lead to their being neglected. Another important developmental trend is the increasing use of information and communication technologies in assessment which opens new perspectives not only for measuring hard-to-measure skills but also for the formative use of assessment by teachers (European Commission, 2012b). Finally, a further recent development deserving particular attention is the use of the "big data" or "analytics" approach which has been made possible by the massive production and accumulation of data by assessment regimes monitoring individual students in various competence areas and during longer periods of time. As highlighted in a relevant recent OECD publication "*public administration as well as educational and health services are the sectors were the adoption of data analytics could have the highest impact in the relative short run*" (OECD, 2014; 5; OECD, 2015c). In fact, national assessment and evaluation systems are producing a remarkable amount of data which typically remain unexploited. Data mining and analytics might be powerful tools to discover hidden patterns of factors leading to poor or high student outcomes, and some educational evaluation systems might rely increasingly on this.

This section on systems and policies of educational evaluation has one further question to answer: does the European Union, similarly to its member states, have an educational evaluation system and does it or should it, like its member states, have an educational evaluation policy? The research questions of this study, presented in the previous section, imply a positive answer to these questions. It is well known that the Treaty on the European Union allows only measures which encourage cooperation between the Member States and support or supplement their action, and it excludes the harmonisation of national laws and regulations. Evaluation is a typical "soft" policy tool that the Union can use in a legitimate way within the legal framework of the Treaty to support and supplement the action of its member states without harmonising their national regulations. In fact, in

---

[2]   See the relevant website of the Council of Europe here: http://www.coe.int/t/dg4/education/elp.
[3]   25 OECD countries participated, of which 17 were EU member countries (Austria, Belgium, Czech Republic, Denmark, Finland, France, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Sweden and the United Kingdom).
[4]   The author of this paper was chairing the body established by the OECD Education Policy Committee which was supervising the review process (the "*Group of National Experts on Evaluation and Assessment*").

the last decades the European Union has developed a sophisticated and advanced system of educational evaluation and the analysis of its actions shows that it has also developed a rather coherent educational evaluation policy.

It is important to stress, however, that educational evaluation at the EU level is never targeted directly to individual pupils, teachers or schools. Even if data are collected at the level of individual pupils, teachers or schools, in the cases of sample-based surveys, the goal is not the assessment or evaluation of these specific units but the development of indicators to be used at national level or the development of new assessment or evaluation approaches. Referring to the terminology of the OECD review this can be categorized as "system evaluation": the objects of evaluation being national systems and national policies. Even if data on particular students, teachers or schools are used they are typically used in an aggregated form. Furthermore the actions of the European Union related with educational evaluation are typically targeted not at evaluating directly the quality or the performance of the education systems of the member states but at supporting them in developing their own national assessment and evaluation systems in order to make these systems more effective in improving student outcomes. **The mission of the EU is, in fact, not to operate directly educational evaluation mechanisms but to support the improvement of the effectiveness of national mechanisms.** The EU might also have a key role in fostering innovations making national educational evaluation systems more effective. Innovation within national systems can be generated not only by EU level programmes aimed at direct assessments of performance at school, teacher or student level but also through supporting mutual learning and horizontal knowledge sharing about effective assessment and evaluation technologies and approaches.

Before addressing the specific research questions presented in the introductory section of this study we have to present the key features of the educational evaluation system of the European Union and also the key elements of its policy in this field.

2. THE EDUCATIONAL EVALUATION SYSTEM OF THE EUROPEAN UNION

One of the preliminary assumptions of this study has been that since the middle of the nineties the European Union has developed an advanced system of educational evaluation and it has also conducted a relatively coherent policy in this field. The development of the educational evaluation system of the Union has been strongly connected to the growing stress on quality education seen as a key factor of economic growth and competitiveness and also to the emerging need for community level policy coordination.

2.1. The emergence of educational evaluation at EU level

The roots of the educational evaluation related activities of the European Union can be tracked back to the seventies and the eighties when the first programmes and institutions aimed at making national education systems more transparent through sharing data and qualitative information were started, still in a community of nine and later twelve members (Pépin, 2006). Disclosing data and making them publicly available do not necessarily have a deliberate evaluative function but this automatically creates the possibility of this type of use and, if this happens, there are always actors who start using the data for evaluation purposes. The creation the Eurydice network in 1980 was perhaps the most important step into this direction, as well as the establishment of various "transparency mechanisms" for the mutual recognition of vocational and academic qualifications.

2.1.1. Developing European quality indicators

In the period following the inclusion of the new articles on education and training into the Treaty in 1992 a number of new developments contributed to the gradual emergence of educational evaluation at the level of the European Union. The first coherent strategy of the Union for the education and training sector (European Commission, 1995), in its section analysing possible future developments, identified three key trends, and one of them was the *increasing role of evaluation*. The notions of evaluation and quality became central in community education policy discourses and actions as reflected, for example in the launching of an influential pilot project on school evaluation in 1997 (MacBeath et al., 1999) which led later to the adoption of the recommendation by the Parliament and the Council in 2001 on quality evaluation in school education.[5] This recommendation has demonstrated not only the commitment of the community to support the development of school evaluation components of national educational evaluation systems but also the emergence of a coherent community approach in this field (creating, for example, a balance between external and internal or formative and accountability oriented approaches).

During the last two decades the European Commission supported many projects focussing on educational assessment and evaluation which contributed to the development of new assessment and evaluation instruments and approaches, and enhanced mutual learning or the transfer of knowledge and best practices in this area. The pilot project mentioned in the previous paragraph was one of them. Another typical example was the "European Education Quality Benchmark System"[6] project in 2003 and 2004, which resulted in the creation of a self-evaluation and benchmarking tool for schools in order to help them to

---

[5] Recommendation of the European Parliament and of the Council of 12 February 2001 on European cooperation in quality evaluation in school education, OJ L 60, 1.3.2001.

[6] See the website of the project here: http://spica.utv.miun.se/2eqbs/sectionone/index.lasso.

"*develop the school as a learning organisation within a dynamic and constantly changing environment*" (Snyder, 2007). A further example of the many projects related with assessment, evaluation or quality assurance is the "Quality Assurance through Synergy of Internal and External Evaluation of Schools" (SYNEVA) project,[7] implemented between 2004 and 2007, which aimed, among others, to collect and disseminate examples of good practice in school evaluation. A further similar example is the "Self-Evaluation for European Schools" (SEFES) project,[8] implemented between 2004 and 2006 with the goal of "*establishing a culture of self-evaluation at the participating schools*." All these projects were funded from the education programmes (Socrates, and later the LLL programme) of the Commission. They contributed to the emergence of a common European thinking on assessment, evaluation and quality and the spreading of evaluation practices in accordance with the 2001 Recommendation.

By the end of the nineties quality evaluation became one of the most important pillars of policy actions in the education sector in the European Union and this gained increasing support from ministers of education. This was perhaps the most clearly demonstrated by the decision of education ministers (including those of the candidate countries) during their informal meeting in 1998 in Prague to identify a number of *quality indicators* for school education to support the evaluation of national systems. This has led to the adoption of "*sixteen quality indicators*" in 2000 in Bucharest by the education ministers (European Commission, 2001) which can be described in this study as the starting point of a new period in the development of the educational evaluation system of the Union. The key feature of this new period is the growing use of evaluation and evaluation tools (especially indicators and benchmarks) as *instruments of governance*.

There is an abundant literature analysing the use of indicators and benchmarks as instruments of global and European governance in the education sector. This has been described as *governing by number* (Grek, 2009), *governing through data* (Grek- Ozga, 2010), *governance by information* (Bogdandy - Goldmann, 2008), *governing by standards* (Lawn, 2011) or *governance through comparison* (Nóvoa et al., 2014). This represents a new situation in which educational evaluation is not any more a technical issue of judging the quality of teaching and learning but a powerful instrument of steering systems. This trend has been dramatically reinforced by the decision of the European Council in 2000 to apply the Open Method of Coordination (OMC) in the education sector in the framework of the Lisbon Process. The use of indicators and benchmarks is a key element of the OMC which transformed what was originally called "quality indicators" into a tool of community pressure on member countries.

The use of evaluation instruments as tools of governance in the framework of the Lisbon Process has fundamentally determined the development of the educational evaluation system of the European Union. This turned evaluation from a technical or pedagogical area of limited importance into a high stake strategic field and the object of major political actions. The first strategic framework of the community for using the OMC in the education sector, the Education and Training 2010 programme (originally called "Detailed work program…"[9]) defined not only goals and actions but also indicators to measure progress towards the common goals. Parallel to the working groups created for the implementation of the Education and Training 2010 strategy (ET2010) a *Standing Group on Indicators and Benchmarks* (SGIB) was set up, with the representatives of the member states and of the

---

[7] See the website of the project here: http://network.syneva.net.
[8] See the website of the project here: http://www.comenius-sefes.eu.
[9] Detailed work programme on the follow-up of the objectives of education and training systems in Europe. Council of the European Union. Brussels, 20 February 2002.

Commission, charged to give advice to the latter in the field of developing and using indicators. Since its establishment in 2002 the SGIB has played a key role in developing the indicator system used by the European Union to monitor the performance of the education systems of its member states. This body proposed, in 2003, 29 indicators to monitor the progress towards the 13 objectives of the ET2010 strategy (European Commission, 2003a) and also the development of new indicators (see *Annex 1*). In the same year the Council adopted its first Conclusions related with indicators, in which it proposed the recognition of "*the central role of indicators and reference levels in giving directions and measuring progress towards the thirteen objectives in the objective report*."[10]

In the following years the Council adopted two major Conclusions on indicators. The 2005 Conclusions[11] were particularly important because this was a clear formulation of the need for a coherent framework of education and training indicators and, in fact, it illustrated the emergence of coherent policy thinking and action in this area. Ministers adopting the Conclusions stated that "*it is desirable to develop a coherent framework of indicators and benchmarks to monitor performance and progress in the field of education and training*" and they invited the Commission to develop such a coherent framework. The Conclusions contained, among others, the decision of the ministers of education of the member states to establish a new "*research unit*" in the framework of the Joint Research Centre with the explicit goal of indicator development. Later this new unit, the Centre for Research on Education and Lifelong Learning (CRELL) became the most important agency of the European Commission to implement its policy related to educational evaluation. In the context of this study it is particularly important to highlight that the same Conclusions confirmed the "*need to continue to enhance cooperation with other international organisations active in this field (e.g. OECD, UNESCO, IEA), particularly in order to improve international data coherence*".

Two years later, in 2007, the Council adopted new Conclusions[12] endorsing the Communication of the Commission entitled "*A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training*" (European Commission, 2007a). From the perspective of this study this is a particularly important document because it summarizes what we could call the educational evaluation policy of the European Union. The Commission's Communication proposed 20 core indicators for the Council (see *Annex 2*) which endorsed the development and use of 16 of them. The Council, basically following the proposal of the Commission, grouped the indicators into the following four different groups:

> "*indicators which can largely be based on existing data and whose definition is already broadly established (…):*
>   *- participation in pre-school education*
>   *- early school leavers*
>   *- literacy in reading, mathematics and science*
>   *- upper-secondary completion rates of young people*
>   *- higher education graduates,*

---

[10]   Council Conclusions of 5 May 2003 on reference levels of European average performance in education and training (Benchmarks) (2003/C 134/02).
[11]   Council conclusions of 24 May 2005 on new indicators in education and training (2005/C 141/04).
[12]   Council Conclusions on a coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training 2802nd EDUCATION, YOUTH and CULTURE Council meeting. Brussels, 24-25 May 2007.

those indicators which can largely be based on existing data and whose definition still needs further clarification (…):
- *special needs education*
- *ICT skills*
- *investment in education and training (…),*

those indicators which are still in the process of development in co-operation with other international organisations (…):
- *civic skills*
- *adult skills*
- *professional development of teachers and trainers,*

those indicators which are still in the process of development and which would be based on new EU surveys (…):
- *language skills*
- *learning to learn skills."*

In the context of this study this classification of existing and future indicators is of particularly importance because (1) it defined some of the indicators already provided by other international organisations as "established" and it also stated that some other indicators, then still in a process of development, would be provided by such organisations, and (2) it made it clear that the EU itself was committed to use also indicators based on its own surveys. In these Conclusions the Council defined two areas where own surveys were to be conducted: foreign language learning and "learning to learn" competences. It was in these two areas that ministers authorised the Commission to launch direct data collection surveys, similar to the PISA survey of the OECD. The experiences gained in the process of implementing these two surveys are particularly valuable because they show well the capacities of the Commission to implement such exercises and also the challenges it faces when doing this.

The development of indicators and benchmarks and the use of these new instruments within the emerging framework of policy coordination is naturally not the only form of activities related with educational evaluation at the level of the European Union. We have already seen how the theme of quality and evaluation became central in the post-Maastricht period. In 1995 a *European Network of Policy Makers for the Evaluation of Education Systems* was established with members appointed by national ministries with the aim of exchanging information related with educational evaluation and initiate or facilitate European cooperation in this field (Bonnet, 2006). This was not only a clear sign of the existence of efforts to strengthen European cooperation in the field of educational evaluation but it also meant the emergence of a relatively influential group of national stakeholders in higher administrative positions committed to Europeanise this field. The Network played, among others, a key role in preparing the first major European exercise of measuring skills directly at the level of individual students and pupils (see the details later in the section on "*2.3. The feasibility of direct school/pupil level data collection at European* level"). It also supported a number of projects funded by the European Commission which significantly contributed to the process of Europeanising this hitherto national domain.[13]

In the same year, when the European Network was established, another important associative structure emerged: the *Standing International Conference of Inspectorates* (SICI).[14] This is an association of national and regional inspectorates of education operating

---

[13]   See the regular bulletin entitled „Evaluation" published by the Network.
[14]   See the website of the association here: http://www.sici-inspectorates.eu/Home.

now with 32 member organisations. SICI has also played a key role in the Europeanisation of the educational evaluation field though supporting exchange of information between national inspectorates and enhancing the modernisation of the inspection process through, among others, common projects often funded by the European Commission.

A further association worth of being mentioned in this report is the *Association for Educational Assessment – Europe* (AEA)[15] founded in 2000, with the purpose of fostering "connections and developments in assessment across Europe and beyond". This is an association of assessment professionals promoting further professionalization in this area through, for example, developing relevant competences and common European standards. In 2012 this organisation published a European Framework of Standards for Educational Assessment for "test providers, score users and (educational) authorities" with the aim of fostering transparency and strengthening quality (AEA, 2012). The development of European assessment standards as a bottom up initiative by a European professional association might be considered as a particularly important step towards the Europeanisation of the field of educational evaluation. Some expert networks playing an important role in developing and using educational indicators and established with the direct support of the European Commission are also worth being mentioned in this context: the NESSE network of experts in social sciences of education and training, created in 2007,[16] and the EENEE network of economists of education,[17] launched in 2004 are the most prominent examples.

The weight of the policy theme of educational evaluation has continuously been growing since the late nineties not only because it has been connected with indicators, benchmarks and policy coordination but also on its own right as a theme related with quality, effectiveness and accountability. As we have seen the development of indicators and benchmarks, later used for policy coordination, was started as the development of "quality indicators" before the Lisbon decision to apply the Open Method of Coordination in the education sector. The 2001 Recommendation on quality evaluation in school education[18] was part of this process, and this orientation was given a new impetus with the adoption of the 2006 Recommendation on European key competences[19] as illustrated by the new initiatives to assess some of these competences through direct European surveys at the level of schools and individual students.[20]

2.1.2. Assessing the European key competences

The idea of assessing the acquisition of the eight key competences through direct European surveys at student level and also supporting the capacity of national assessment systems to do so, appeared as a particularly strong element of the "Rethinking strategy" of the Commission (European Commission, 2012a; 2012b). The related communication of the Commission suggested that national assessment systems should be developed so that they could monitor student performance in terms of learning outcomes based on the definition of European key competences. As the communication stated "*the power of assessment has to be harnessed by defining competences in terms of learning outcomes and broadening the scope of tests and exams to cover these*" (European Commission, 2012a; 7). Integrating the assessment of key competences (especially those related with entrepreneurship, digital skills and foreign languages) into existing national assessment systems was seen by the

---

[15] See the website of the association here: http://www.aea-europe.net.
[16] See the relevant website of NESSE here: http://www.nesse.fr/nesse/about-nesse/about-nesse/mandate.
[17] See the website of EENEE here: http://www.eenee.de/eeneeHome/EENEE/Mandate.html.
[18] European Commission (2003a).
[19] Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning.
[20] See the chapter on „*2.3.   The feasibility of direct school/pupil level data collection at European* level".

Commission as one of the most important policy instruments to make sure that the development of these competences becomes key element of national curricula. As the background analysis accompanying the communication stressed: "*assessment is crucial for the development of key competences for two principal reasons. Firstly, by focusing on certain learning outcomes, assessment sends a clear signal that these competences are the priority for teaching and learning. Secondly, by providing information about learners' progress towards these learning outcomes, assessment helps to adapt teaching and learning more effectively to learners' needs*" (European Commission, 2012b; 8).

The analytical document of the Commission underlined that "*the main challenge now is to assess all key competence*s" and stated that „*yet too little is done on assessment*", illustrating this with data from a Eurydice survey which demonstrated that national assessment systems were almost completely neglecting the measurement of transversal competences (see *Table 1*). The related Conclusions of the Council[21] invited the member countries to introduce "*measures to develop transversal skills and competences as described in the 2006 Recommendation on key competences for lifelong learning, from early stages of education up to higher education, using innovative and student-centred pedagogical approaches*" (…) "*taking into consideration the Rethinking Education communication*", that is, it endorsed the strategy of the Commission focussing on the use of assessment as a major policy instrument. The need to put more stress on the development of transversal competences was also an important element of the related resolution of the European Parliament[22], although the role of assessment to assure "*more efficient education with a focus on transversal skills*" was not underlined in this resolution.

Table 1: National tests of key competences in compulsory education, 2008/09

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK-ENG/NIR	UK-WLS	UK-SCT	IS	LI	NO
Mother tongue	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
Mathematics	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
Science	✓		✓	✓		✓		✓	✓		✓	✓			✓	✓			✓	✓		✓			✓	✓		✓	✓		✓			
Foreign language(s)	✓		✓			✓	✓	✓	✓		✓	✓			✓				✓			✓	✓			✓	✓				✓	✓		✓
Civics								✓		✓	✓														✓									
Cultural awareness and expression																																		
Entrepreneurship																																		
Learning to learn																																		
Digital competence																																		

Source: European Commission (2012b)

The 2012 "Rethinking strategy" of the Commission was supported by a number of programmes and initiatives which demonstrated that without a coherent policy of assessment the chances of implementing the Key Competences Recommendation would have remained very low. As the background document prepared by the Commission for a conference on the assessment of key competences held by the Belgian Presidency in 2010

---

[21]   Council Conclusions on investing in education and training - a response to Rethinking Education: Investing in skills for better socio-economic outcomes and the 2013 Annual Growth Survey. 3221st Education, Youth, Culture and Sport Council meeting Brussels, 15 February 2013.

[22]   European Parliament resolution of 22 October 2013 on Rethinking Education (2013/2041(INI)).

underlined: "*the role of assessment has (…) been a recurring theme in Peer Learning Activities (PLAs) of the Cluster Key Competences and Curriculum Reform[23]: the PLAs indeed have shown how any curriculum reform will remain incomplete if assessment regimes and teachers' own competences have not been addressed*" (European Commission, 2010a).

The "Rethinking strategy" of the European Commission – endorsed by the Council[24] – can be interpreted as a major step towards a coherent European assessment policy which would use the assessment of student performance as a major instrument to incite member states to give an appropriate weight to the development of the key transversal competences in their national curricula for school education. Assessment was seen as the strongest possible instrument to enhance the implementation of the 2006 Recommendation on key competences. As the strategy document stated: "*What is assessed can often determine what is valued and what is taught*" adding that "*while many Member States have reformed curricula, it remains a challenge to modernise assessment to support learning*" (European Commission, 2012a; 7). It seems to be obvious that these strategic considerations are to be taken into account when thinking about the current state and the possible future of a European system of educational evaluation.

The strategic considerations of the "Rethinking strategy" and the implications of them for educational evaluation at European level have to be accounted for in the light of the emerging new European governance mechanisms. The relevant decisions of the Council[25] have been making clear references to those new instruments of the Open Method of Coordination which might be particularly relevant from the perspective of a European level system of educational evaluation. The use of these new instruments – especially, the European Semester with its education sector dimension, the high level voluntary peer reviews focusing on the implementation of education sector related country-specific recommendations (CSR) and the more concentrated work of Thematic Working Groups (TWGs) supporting the implementation of the ET2020 strategy – creates continuous community level activities with direct implications for educational evaluation.

The intensive use of indicators in the enhanced monitoring process, for example, now including also the high level voluntary peer reviews, will probably sustain the demand for further indicator development and for the increasing of reliability and validity of existing indicators and it might also strengthen the general political support for this activity. **Even if this is not the explicit goal, this might add important new pieces to what we can already describe as a European system of educational evaluation**.

2.1.3. Quantitative and qualitative dimensions

It is important to stress that the new pieces continuously added to what we describe here as a European system of educational evaluation **are not limited to measurable data and quantitative information**, such as the outcomes of direct data collections at school or student level. Although this study is focusing on the quantitative aspects of educational evaluation, with a special emphasis on data, indicators and measurements, it is important to stress that educational evaluation, especially at European level, cannot be reduced to

---

[23] The clusters were working groups with the representatives of member states having a particular interest in a specific aspect of the ET2010 strategy, and the PLAs enhancing mutual cross-national learning were among the typical forms of their activities.

[24] See the Council Conclusions on investing in education and training — a response to 'Rethinking Education: Investing in skills for better socio-economic outcomes' and the '2013 Annual Growth Survey'. Official Journal of the European Union. 5.3.2013.

[25] Beyond the decision mentioned in the previous footnote see also: Council conclusions of 26 November 2012 on education and training in Europe 2020 — the contribution of education and training to economic recovery, growth and jobs. Official Journal of the European Union. 19.12.2013; Council conclusions — Efficient and innovative education and training to invest in skills (1) — Supporting the 2014 European Semester.

this dimension. Most of the components of the OECD conceptual framework followed in this study (presented earlier in *Figure 1*) are of qualitative nature or have strong qualitative components, such as the evaluation of schools, teachers or programs, including the evaluation of curriculum material.

Since the middle of the nineties there have been many community level actions supporting the development of the qualitative dimension of educational evaluation and it is expected that such actions will be initiated also in the future. The 2001 recommendation on quality evaluation in school education mentioned earlier[26] is perhaps the most prominent example in this area together with the active community support to develop competence standards for the teaching profession (see, for example Caena, 2011 and Stéger, 2014). The latter can be interpreted as an action supporting educational evaluation because teacher competence standards are among the most important building blocks of most teacher evaluation systems. As for the former, there have been many programs supporting mutual learning, sharing of experiences and common development of evaluation instruments, as illustrated, for example, by the Eurydice publication on school evaluation also mentioned earlier (European Commission/EACEA/Eurydice (2015).

As for the area of program evaluation – including both the evaluation of the impact of educational development programs or interventions and the evaluation of curriculum-related objects – the European Union has already become a major player and its role could be further strengthened. The strong impact assessment culture and practice developed by the European Commission[27] has already been transferred to policies, programs and interventions in the education sector (Souto-Otero, 2015). Through the education programs (Erasmus+) and through the development interventions funded by the Structural Funds in the education sector this culture (together with the relevant accompanying methodological repertoire) is being continuously transferred to those member states where the culture of program evaluation has traditionally been weak. The focus on learning outcomes, strongly encouraged by the European Union through the implementation of EQF in each educational subsystem, including basic education, and through several other instruments, makes curricula more transparent and standardized and facilitates curriculum evaluation. By the use of these instruments European Union has significantly modernized curriculum evaluation thinking and practice in several member states.

Since their inception the TWGs have played a particularly important role in enhancing the qualitative dimensions of educational evaluation in the European Union, and the same is valid for the various thematic and policy networks initiated and funded by the European Commission. The TWGs have been active in supporting the development of new European standards in particular areas that can be used for qualitative evaluation. School evaluation is one of these areas where the Council has encouraged, for example, to "*explore the scope for Member States to strengthen their own quality assurance provisions and initiatives in the fields of pre-school education, school education and adult learning in the light of the experience gained in other sectors*" in the framework of the Open Method of Coordination.[28]

In this respect special attention has to be paid to the activity of the TWGs focusing on primary and secondary education and transversal key competencies. For example, the assessment of student competences is a key component of the mandate of the TWG on

---

[26] See footnote 5.
[27] See the website "Impact assessment" of the European Commission (http://ec.europa.eu/smart-regulation/impact/index_en.htm).
[28] See the Council conclusions of 20 May 2014 on quality assurance supporting education and training. Official Journal of the European Union. 14.6.2014.

transversal key competencies,[29] and this TWG has, in fact, been particularly active in this area. Although the assessment of student learning outcomes or qualitative school evaluation are not strong focuses in the core activities of the TWG working on school education (which is focussing particularly on early school leaving) there are several elements in its operation which might have direct implications for the development of educational evaluation at European level.

The role of thematic and policy networks could be illustrated, for example, by the European Policy Network of School Leadership (EPNoSL) supporting the development of competence standards for school leaders or the Key Competence Network on School Education (KeyCoNet), which has initiated several actions and programs related with the assessment of key competences. EPNoSL has supported, for example, the development of a competence framework for school leaders, called "The Central Five" which can be used and has already been used for evaluation purposes.[30] KeyCoNet has made, among many relevant initiatives, a complete inventory of actions and programs related with the development of key competences, including those related with assessment and based on qualitative methods, such as student portfolios.

2.2. Educational evaluation and the use of indicators and benchmarks

As we have seen, the development of indicators and the adoption of benchmarks based on these indicators have been strongly connected with the use of these tools for *policy coordination* in the framework of the Lisbon Process and, subsequently, in the framework of the EU2020 strategy. The use of educational indicators is, in fact, integrated into the "Europe 2020 governance structure" and can be described as part of the "*surveillance framework for Employment Guidelines*" (European Commission, 2010b). A key instrument of this surveillance is the Joint Assessment Framework (JAF), which was developed for the employment sector by the European Commission in 2010 to monitor the implementation of the common Employment Guidelines. The JAF has later been adapted to the field of education by CRELL (Flisi et al., 2014). Since then it has become the "*methodology to structure the monitoring of Member States' education and training systems and to ensure its consistency and transparency*", and it has also been "*used in the preparation of the annual Education and Training Monitor series and the accompanying country reports, which then feed into each subsequent European Semester in support of EAC's country desk officers and their formulation of country-specific recommendations.*"[31]

The specific education sector strategies guiding policy coordination in the education and training sector (ET2010 and ET2020) defined not only common strategic goals but also specific indicators to monitor the progress of the education systems of the member states towards these common goals. Given the nature of indicators, the Community could naturally use them not only to monitor the outcomes of national education and training policies (that is, for policy coordination) but also to evaluate the achievement of national education systems in certain key areas or, at aggregated level, the quality of teaching and learning in school education in these systems. For this study the relevant question is **how far the mechanism of developing and using education sector indicators can be described as an educational evaluation system.**

---

[29] See the mandate of ET2020 Working Group on Transversal Skills at the "ET 2020 Working Groups" website (http://ec.europa.eu/education/policy/strategic-framework/expert-groups_en.htm).

[30] See the website entitled "The Central Five: The Building Blocks of a Competency Framework" of EPNoSL (http://toolkit.schoolleadership.eu/competency_framework.php).

[31] See the relevant website of CRELL here: https://crell.jrc.ec.europa.eu/?q=research-areas/eu2020-support.

It is important to underline that the meaning of educational evaluation system at community level cannot be the same as its meaning at the level of member states. While member states are using their educational evaluation systems to judge the performance of particular schools and also that of teachers and pupils this function cannot naturally be expected at community level. The aim of community level educational evaluation is either the evaluation of the performance of entire national systems or the support of the development and operation of national educational evaluation systems through spreading good practice, developing model instruments or providing references for national evaluators to benchmark their own system. When the community developed and operated surveys based on direct data collection at school, teacher or pupil level this has never been done with the goal of judging the performance of the particular schools or pupil groups but to give feedback to national systems through aggregated data. This is similar to what PISA does (which does not exclude the creation of school evaluation services based on the methodology of large scale surveys, which can be observed, for example, in the case of PISA).[32]

Given this background the development and the use of European indicators and benchmarks can be logically be described as creation and operation of a European educational evaluation system even if the goal is the monitoring of policies through evaluating the outcomes of these policies. Furthermore, the evaluation of policies is an important component of educational evaluation and assessment framework, as illustrated by the fact that this component has been added to the OECD definition presented above (see *Figure 1*). The relationship between the three phenomena of (1) evaluation, (2) the use of indicators and (3) quality is particularly complex, and the understanding of the dynamic interrelationship of these three entities might require advanced theoretical reflection (Bottani, 2006). In principle, evaluation is possible without using measurable indicators: this is what happens, for example, when schools are evaluated on the basis of qualitative information summarised in reports written by recognised experts expressing an authoritative opinion.

Indicators are typically used to evaluate the overall performance of education systems and the impact of education policies on system level performance, even if the data used for this are collected at micro level. Some of the indicators are directly connected with the process of teaching and learning while in the case of others this connection is indirect. Indicators used to measure early school leaving are a typical example of the latter. Reducing early school leaving is one of the highest level priorities of the EU2020 ("Smart, Sustainable, and Inclusive Growth") strategy of the European Union which is demonstrated by the fact that one of the five targets of this strategy is related with education and one of the two educational "headline targets" is reducing the rates of early school leaving to below 10%. The Recommendation of the Council on policies to reduce early school leaving adopted in 2011[33] invited the member states to "*identify the main factors leading to early school leaving and monitor the characteristics of the phenomenon at national, regional and local level as the foundation for targeted and effective evidence-based policies*". The document contained an important annex specifying a "*framework for comprehensive policies to reduce early school leaving*" and presenting the details of an evidence-based policy in this area. A key component of this is the continuous collection of *multilevel data* as illustrated, for example by the Dutch data collection and analysis tool "*drop out explorer*."[34]

---

[32] See the assessment tool called „PISA-based test for schools" developed by the OECD which can be used by schools to support research, benchmarking or school improvement (http://www.oecd.org/pisa/aboutpisa/pisa-based-test-for-schools.htm).

[33] Council Recommendation of 28 June 2011 on policies to reduce early school leaving, OJ C 191/2011.

[34] See the relevant website entitled "*Aanval op schooluitval*" here: http://www.aanvalopschooluitval.nl/english.
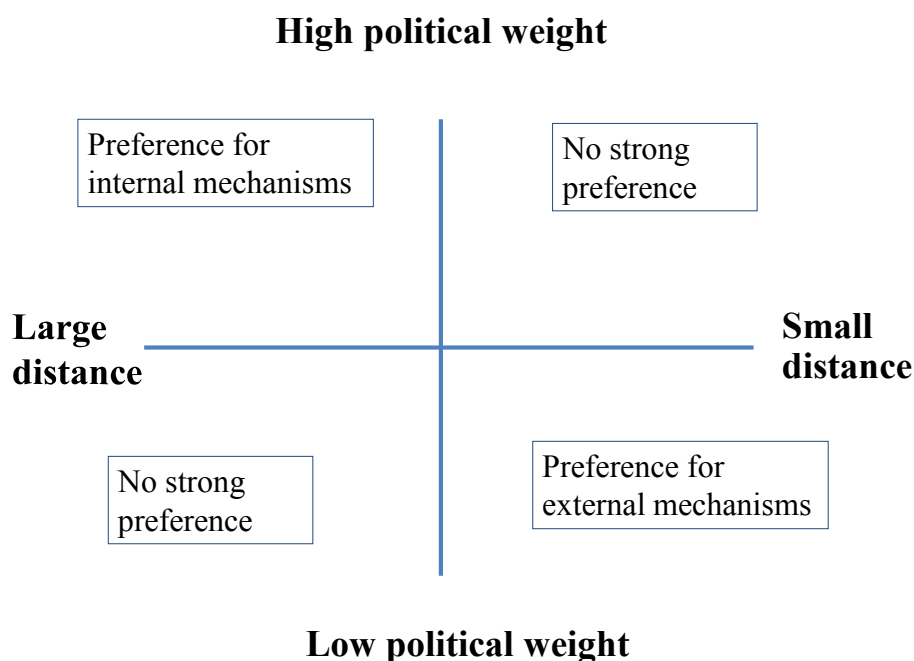
Measurement and analysis instruments like this are typically not seen as being part of an educational evaluation system in spite of the fact that they are based on school level data which, in fact, show the pedagogical performance of individual schools. This is a good example of the vagueness of borderlines between the practice of using policy indicators for policy coordination and certain key elements of educational evaluation systems.

The instruments to monitor early school leaving can be used well for educational evaluation. One of the recommendations of the Thematic Working Group on Early School Leaving, operated by the Commission between 2011 and 2013, was to increase investment in the knowledge base of policies fighting against early school leaving "*through regular and timely collection of accurate data and information*", ensuring that that data and information are "*accessible and used effectively in policy development*". They make it possible to evaluate the impact of relevant policy measures and this is what "*steers policy development*" (European Commission, 2013a).

National education evaluation systems can be designed and operated so that they contribute significantly to the reduction of the proportion and the number of early school leavers but they can also be neutral or even detrimental from this perspective. For example, if national inspectors pay appropriate attention to the evaluation of school level strategies for preventing early school leaving when they visit schools in the framework of external evaluation or if national assessments of student performances pay a special attention to cover student populations who are the most at risk, the operation of the education evaluation system can contribute to the achievement of the prevention of early drop outs from schools. One of the key elements of a possible European support to the process of designing and operating effective national educational evaluation systems could be the identification of those elements of these systems, which have a positive impact on the achievement of the common European goals related with early school leaving.

When educational evaluation is understood in a narrow sense the direct measurement of student achievements through surveys based on school and pupil samples appears as the typical evaluation instrument. The PISA survey, administered by the OECD and the surveys conducted by the International Association for the Evaluation of Educational Achievement (IEA), such as TIMSS and PIRLS, belong to this category. In the context of this study the most relevant question is whether **the European Union itself should operate directly similar evaluation mechanisms or whether it should use data provided by others**. Or, to put it in another way: what balance should be established between data coming from internal or "domestic" and external or "foreign" direct measurements. Answering this question requires both a political and a technical analysis.

From the perspective of a political analysis the answer to the question of balance between internal and external mechanisms could be answered through judging two key factors: (1) the political weight of using educational assessment and evaluation data for policy coordination in the EU and (2) the closeness or the distance between the internal needs and the approaches used by the external data providers (for a schematic illustration see Figure 2). Given the fact that the use of data for feedback has become one of the most important tools of European governance in the field of education and training the political weight is certainly high.

Figure 2: Factors shaping preferences for internal and external mechanisms

High political weight

| Preference for internal mechanisms | No strong preference |

Large distance

Small distance

| No strong preference | Preference for external mechanisms |

Low political weight

Currently the Education and Training Monitor instrument of the European Commission uses a high number of quantitative and qualitative data, including data coming from direct measurement of student achievements to send "*clear policy messages for the Member States*". This instrument "*supports the implementation of the strategic framework for European cooperation in education and training (ET 2020) by strengthening the evidence-base and by linking it more closely to the broader Europe 2020 strategy and the country-specific recommendations (CSRs) adopted by the Council as part of the 2014 European Semeste*r."[35]

The political analysis cannot be detached from the technical analysis which has at least two key components: the technical feasibility of direct data collection by the European Union in the schools of the member states and the costs of such an exercise compared to the costs of "buying" data from the external providers or influencing their data collection approaches. Even if a political analysis leads to the conclusion that internal data collection mechanisms would be preferable, cost and feasibility related considerations might push the balance back towards the external option. In the following we examine briefly the feasibility and the possible cost implications of running direct European surveys on student achievement.

2.3. The feasibility of direct school/pupil level data collection at European level

We illustrate the feasibility and the possible cost/benefit implications of running direct European surveys on student achievement, instead of "buying" data or desirable approaches from external providers, on the example of two major European projects: one of them successful, the other failing. We present these two examples in detail in this study, sometimes even going into apparently technical questions, because only analyses going to these practical details can help the understanding of real challenges and opportunities to be

---

[35] See the website entitled „Education and Training Monitor" of the European Commission: http://ec.europa.eu/education/tools/et-monitor_en.htm).

taken into account when reflecting on the political, professional and financial feasibility of surveys based on direct school and pupil level data collection.

2.3.1. The experience of measuring language competences

The project which can be described as a success is the European Survey of Language Competences (ESLC). The plan of the survey was presented to the Council and the Parliament by the Commission in 2005. Its aim was to "*measure overall foreign language competencies in each Member State*" in order to create a new indicator of "*„high levels of accuracy, and reliability; political acceptance*" (…) "*in line with other similar international indicators*" based on data to be "*„gathered at regular intervals, e.g. cycles of three years*" (European Commission, 2005). The Council took decision on the survey in 2006[36] specifying that "*data should be gathered on competences in first and second foreign languages via a common suite of tests administered to a representative sample of the target population in each Member State from a representative sample of pupils in education and training at the end of ISCED level 2*." The Council decision specified also the governance structure of the survey setting up an "'*EILC Advisory Board composed of a representative of each Member State*."

The survey, carried out five years later, in 2011, was, in fact, planned to follow the design of well-known international student achievement surveys, such as those managed by the OECD (PISA) and the IEA (TIMSS, PIRLS). The development of measurement instruments, the data collection and the analysis were done by a consortium called "*SurveyLang*", consisting of "*eight expert organisations in the fields of language assessment, questionnaire design, sampling, translation processes and psychometrics*".[37] The final and the technical reports were published in 2012, followed by various secondary analyses and publications[38], and the dataset of the survey is available on the website of CRELL.[39]

ESLC, even if its actual impact has been much lower than expected, can be described as a success because in this case the European Union achieved the realisation of a direct measurement of student competences following the international standards set by previous similar international surveys. The success was, however, limited by the relatively low number of member countries participating in the exercise: 53 000 students achieved the test from 16 countries. The results made it possible not only the establishment of a new European indicator but also measuring the actual foreign language competences in a number of EU member countries (see *Figure 3* and *Annex 2*).

The survey has demonstrated that the EU is capable to organise a sample-based direct measurement of student competences in a strategically important area not covered by existing international surveys. The resources needed for the survey were provided by the education programmes (the LLL programme) of the European Commission. The central or common costs were calculated on the basis the central costs for PISA,[40] and the national costs were to be estimated on the basis relevant national budgets for PISA. The national costs, similarly to what we can observe in the case of PISA, were probably very uneven in

---

[36] Council conclusions on the European Indicator of Language Competence. (2006/C 172/01) Official Journal of the European Union. 25.7.2006.

[37] See the website of the Consortium (http://www.surveylang.org).

[38] See for example: European Commission (2012c; 2012d), Araújo - da Costa (2013); Ashton (2013; 2014).

[39] See the website entitled „ESLC Database" of CRELL here (https://crell.jrc.ec.europa.eu/?q=article/eslc-database).

[40] The European Commission calculated the costs of the EILC survey on the basis of the costs of PISA (European Commission, 2005). According to the official PISA website (http://www.oecd.org/pisa/aboutpisa/howtojoinpisa.htm) in 2015 the international overhead costs for new participants in PISA was 182 000 Euro.

function of the specific national institutional frameworks for performing the tasks of school or pupil level data collection.

Figure 3:   The performance of European education systems in first foreign language acquisition

Source: European Commission (2012d).
Note: Percentage of pupils at each level by educational systems, average of three foreign language skills (reading, listening, writing). See also Table 2 and Table 3 in Annex 3.

2.3.2.   The attempt to measure learning to learn competences

The other project, which can be described as a failure case,[41] was the attempt to measure "learning to learn" competences. Learning to learn is one of the eight key competences defined in the related Recommendation of the Council and the Parliament on European adopted in 2006. The establishment of a new indicator measuring this competence was already proposed by the SGIB in 2003 together with the indicator on language competences (see *Annex 1*), and this was also one of the 20 core indicators proposed by the Commission to the Council in 2007. As we could see above, the Council endorsed this indicator grouping it into the category of "*indicators which are still in the process of development and which would be based on new EU surveys*" together with language skills. This shows that there was strong political commitment to realise a survey measuring this competence, similarly to what we saw in the case of ESLC. However, this survey was not realised: only a pilot study was implemented and following this the process seems to have halted.

According to a report published by CRELL (Hoskins - Fredriksson, 2008) the European Network of Policy Makers for the Evaluation of Education Systems was first invited by the

---

[41]   One of the leading experts of this exercise used the term "pitfall" when presenting its story in a conference lecture in 2014 (Stringher, 2014).

Commission in 2005 to submit a proposal on a pilot survey and following this an expert group was set up from experts representing the countries interested in the project. On the basis of the report by this expert group, with the coordination of CRELL the development of the instrument for the pilot was started with the participation of four European universities[42] already having experiences in the field. CRELL established an expert network on learning to learn which worked on the conceptualisation of the rather new competence area.

A pilot with a new instrument, which was a combination of what the four participating universities already used, was conducted in eight countries[43] with 2310 fourteen years old students in 49 schools. The analysis of the national reports indicated that "*further significant theoretical and conceptual research on understanding the definition of learning to learn and how this concept can be made operational is needed*" (Hoskins - Fredriksson, 2008; 28-29). The final report on the pilot is not publicly available on the internet. Following the pilot the references to measuring the learning to learn competence have practically disappeared from the publicly available official documents of the Commission.

A number of publications, beyond the CRELL report quoted above, make some references to the possible causes of the failure of this exercise (see for example: Fredriksson - Hoskins, 2007; Endrizzi - Rey, 2008; Lucas - Claxton, 2009; Daugherty et al., 2011; Kollias, 2011). The most often mentioned cause seems to have been the conceptual difference between those who looked at the learning to learn competence from a cognitive perspective and those who stressed the social and non-cognitive aspects. Some of those belonging to the latter group were oriented more towards competence development than to assessment and could not fully support an enterprise aimed at developing an indicator to evaluate the overall performance of educational systems for policy coordination and monitoring. This resulted in a measurement instrument which, as it was realised during the pilot project, did not work appropriately in practice.

One of the experts leading the 2008 pilot project added, in a conference lecture held several years later, a further point which is particularly relevant from the perspective of this study: the difficulty to make a clear distinction between what a learning to learn competence test would measure and what some tests of the PISA had already been measuring. As he noted: "*basic knowledge in mathematics, science and reading comprehension as tested in international tests are obviously closely related to learning to learn, but if tests in those subjects could be used to measure learning to learn this would mean that learning to learn is more or less the same as reading literacy, mathematic literacy, science literacy and problem solving taken together*" (Fredriksson, 2013). This also raises the question of transferability of compatibility of test components between external and internal surveys: high level of transferability or compatibility might increase the advantages of using external survey data.

2.3.3.   Lessons learnt from past experiences and further initiatives

The two cases demonstrate well the feasibility problems of EU led direct assessments of student   competences   in   the   framework   of   the   model   presented   in

---

[42]   The University of Helsinki, the University of Bristol, the University of Amsterdam and the University of Madrid.

[43]   France, Italy, Cyprus, Slovenia, Finland, Austria, Spain and Portugal.

Figure 2. In both cases the Commission tried to develop new measurement instruments and to implement surveys based on these instruments in strategic areas. In the case of the measurement of language skills the approach was quite close to the existing practice in the member countries as it relied on a competence definition already well rooted in this practice. Furthermore: in this case no similar measurement was conducted by other international agencies, that is, the alternative of using already existing mechanisms was not possible. In the case of measuring the learning to learn competences it was not possible to develop an instrument that would have been close to the existing practice of the member countries for two reasons. One the one hand, existing practices were scarce, given the nature of the learning to learn competence which was, in contrast with foreign language competences, not a well-established well known field in most countries. On the other hand, the already existing approaches of the member countries were not only too distant from each other but in certain aspects they were almost excluding each other. Furthermore, the conceptualisation work revealed that what the planned European survey would have been measuring was not too distant from what has already been measured by the PISA survey, that is, it was difficult to find good arguments for an independent European survey which would not duplicate what the OECD was already doing.

Beyond the two examples of measuring student competences through direct school or student level surveys presented in the two previous sections there might be other fields where similar surveys might be envisaged. Three of them seem to be particularly relevant from the perspective of the educational strategy of the European Union: civic, digital and entrepreneurial competences. All the three are transversal competences figuring among the eight key competences of the 2006 Recommendation of the Council and the Parliament.[44] In each case the direct measurement might be conceived both at the level of school aged students and at the level of the entire population including school aged students.

As for civic competences there has been an intensive work of indicator development, under the supervision of CRELL, relying on the relevant IEA surveys conducted in 1999 and 2009[45] and on other surveys conducted among adults (Hoskins et al., 2006; Hoskins et al., 2012). The Education and Training 2020 strategy identified active citizenship as one of the four major policy goals and the indicator development work in this area has been endorsed by the education ministers of the Union (Hoskins et al., 2012). The indicator of civic skills was mentioned in the 2007 Council Conclusions on indicators[46] as one of the sixteen core indicators to be used by the Commission, being "*in the process of development in co-operation with other international organisations*". Although the EU could, in the past, use data from existing surveys conducted by other organisations, the strategic importance of citizenship education and the specific European needs (e.g. measuring the development of European identity) could justify the creation of a system of new, independent, regular data collection.

Digital competences or ICT skills also figured among the sixteen core indicators defined by the 2007 Council Conclusions as one of those "*which can largely be based on existing data and whose definition still needs further clarification.*"[47] The 2013 Communication of the Commission on „Opening up education…" mentioned the intention of the Commission to "*develop measuring tools and indicators to monitor more closely the integration of ICT in teaching and training institutions, and support Europe-wide quantitative surveys*"

---

[44] See footnote 19.
[45] The International Civic and Citizenship Education Study (ICCS) and the Civic Education Study (CIVED) (see the relevant IEA websites: http://www.iea.nl/iccs_2009.html and http://www.iea.nl/cived.html).
[46] See footnote 12.
[47] See footnote 12.

(European Commission, 2013b). A CRELL analysis suggested that the digital competences of individuals could be measured through questionnaires or through "*digital tasks*", that is by using special (standardised) tests, also adding that "*there are no European-level examples of this type of measurement*" (Ala-Mutka, 2011). The possible measurement of digital competences has been supported by an important development work performed by CRELL leading to the elaboration of an advanced self-evaluation tool based on the identification of five types of relevant competences at three different levels (Ferrari, 2013).

2.3.4. Entrepreneurial competences: a case deserving special attention

Entrepreneurial competences are the third form of transversal competences which might be, in principle, measured through direct European measurement. Although, unlike the two others, this does not figure on the list of indicators suggested by the 2007 Council Conclusions, since then the need for indicators measuring the impact of policies enhancing entrepreneurship education has been strongly stressed by several key policy documents. For example, the Green Paper on Entrepreneurship presented by the Commission a few years earlier (European Commission, 2003b) stressed not only the role of education in "*encouraging entrepreneurship, by fostering the right mind-set, awareness of career opportunities as an entrepreneur and skills*" but also the importance of measuring entrepreneurship, including preferences and attitudes, that is, factors directly influenced by education. Given the increasing awareness of European political bodies of the importance of entrepreneurship education it is worth consider the possible direct measurement of skills in this area in more details.

Entrepreneurship education is one of those soft areas where the evaluation of the impact of policy interventions, including curriculum developments within the formal school system, is particularly challenging. Entrepreneurial skills are not easy to define and their measurement is also difficult. However, given the strategic importance of the effective development of these skills in the European policy context, the question of how to assess them and how to support national governments to assess them seems to be a crucial one. This is the reason of the Commission setting up, in 2012, an Expert Group on Indicators on Entrepreneurial Learning and Competence „*to assess existing data sources that can support indicators of entrepreneurship education and to define a framework of monitoring indicators that will allow for an assessment of the extent of current entrepreneurship education activity across Europe*" (EACEA, 2015). The work of this group was supported by a detailed survey of country level mechanisms and tools of monitoring entrepreneurship education and using indicators in this area (GHK, 2011). In fact: in some European countries, where entrepreneurial education has been a political priority for a longer period and significant investments, have been made in this area, advanced assessment tools have already been developed which could probably be used also at EU level if such measurements were initiated by the community.[48]

The Thematic Working Group on Entrepreneurship Education, operational between 2011 and 2013 and composed of national experts delegated by the member states, underlined in its report the „*significant challenges to our ability to evaluate and monitor entrepreneurship education due to a lack of robust data and indicators at an EU level and in most Member States*" and proposed the establishment of „*new EU-level data and monitoring to broaden the evidence base beyond existing reliance on start-up data and provide robust indicators on key areas of entrepreneurship education*" (Thematic Working Group…, 2014).

---

[48] See, for example Moberg et al., (2014).

The Council in its 2014 Conclusions on entrepreneurship education[49] invited the Commission to "*enrich the evidence base on entrepreneurship education*" and „*further explore the usefulness and possibility of defining indicators on entrepreneurship education in order to broaden the evidence base and help to identify areas of best practice (…) taking into consideration the work done by the Expert Group on Data and Indicators of Entrepreneurial Learning and Competence (…) with the appropriate involvement of the Standing Group on Indicators and Benchmarks*". It also suggested the exploration of „*the potential of developing free and open digital and online tools that strengthen the acquisition of entrepreneurial and innovative skills and competences.*" The European Parliament, in its recent Resolution on entrepreneurship education[50] called the Commission "*to include measures related to entrepreneurship education into the European Semester evaluation indicators, starting in 2016*" and also to support the monitoring of entrepreneurship related ICT, problem-solving and financial literacy skills through „*longitudinal research in this area*". This resolution seems to demonstrate not only the commitment of the Parliament to give strong support to the development of entrepreneurship education at European level and to rely on evidence and "*established statistical tools and techniques*" but also the recognition that such evidence can be created only through the direct measurements of entrepreneurial skills.

The measurement of entrepreneurial skills is the area where possibilities to involve industrial partners might be the largest. This is an important aspect for at least two reasons. On the one hand, the active participation of industrial partners, especially those who are leaders in innovation, including those representing the "learning industry", could enhance the bringing in of innovative solutions regarding both the design of measurement instruments and the use of results. On the other hand, the contribution of industrial partners could enhance the financial sustainability of the project. In this respect it is worth recalling the statement of the position paper of the European Learning Industry Group (ELIG) answering the "Opening up Education" communication of the European Commission which stressed the need for "*a common European understanding and approach to learning outcomes for entrepreneurship education*" (Burger et al., 2013). Measuring learning outcomes in entrepreneurship education is certainly one of those areas where the engagement and support of industrial partners, including public agencies (e.g. national ministries of economy or EU level agencies) could be easily gained.

Entrepreneurial skills are often linked with creativity which is a further area where the direct measurement of individual skills could be considered. The Education and Training 2020 strategy makes strong linkages between creativity and entrepreneurship, presenting the second as including the first. Measuring creativity might be even more challenging than measuring entrepreneurial skills. A report of a conference organised on this topic in 2009 by CRELL concluded, however, that "*despite its complexity, creativity can be measured*." When presenting the goals of this conference the representative of the European Commission expressed the intention of the Commission "*to identify the necessary steps to conduct a large-scale survey to measure individual creativity*" (Villalba, 2009).

The direct measurement of digital, civic and entrepreneurial skills (including creativity) through EU supported regular surveys at the level of individuals (including students) would probably be a logical development in the light of the strategic importance of these skills for social and economic development in Europe and it would be in line with the key strategic documents of the Union. The measurement of these horizontal skills among students and among the adult population is, however particularly challenging, given the lack of stable consensus on how these skills should be defined. The experiences of the earlier measurement efforts presented in this study suggest, however, that this might be feasible in case of appropriate political support and commitment by the member states.

---

[49] Council conclusions on entrepreneurship in education and training (2015/C 17/02).
[50] European Parliament resolution of 8 September 2015 on promoting youth entrepreneurship through education and training (2015/2006(INI)).

3. EU-OECD COOPERATION IN THE FIELD OF EDUCATIONAL EVALUATION

One of the questions to be addressed by this study, as presented in the introductory section, has been "how the surveys of OECD and OECD indicators can support the evaluation procedures of the EU". A related, additional question, formulated in the section entitled "*2.2. Educational evaluation and the use of indicators and benchmarks*", has been what balance should be established between evaluation and assessment data coming from internal and external sources. The analytical scheme presented in Figure 2 has been aiming at facilitating the finding of answers to this second question.

3.1. Partnership in indicator development and data collection

The most important external data provider in the education sector for the EU is, undoubtedly, the OECD, including both data used as indicators to support policy coordination and data supporting the evaluation of the effectiveness of national systems through measuring student outcomes. As we have stressed, the EU is increasingly relying on data coming from the PISA survey of OECD, and from other surveys, such as PIAAC and TALIS. It seems to be necessary, therefore, to examine more closely the nature of cooperation between the EU and the OECD from the perspective of educational evaluation at European level.

The cooperation between the European Union and the OECD in the field of educational evaluation might be described as a strategic priority for at least two reasons. First: given the fact that most member countries of the European Union are members of the OECD and participate regularly in various OECD surveys, coordination between these two international/supranational players is a natural need of each country with double membership. It would be difficult for countries to manage domestically a situation in which one of the international communities they belong to would go into a different direction than the other. As international measurements exert increasing political influence on domestic education policy processes contradicting political messages coming from the international level could cause policy coordination troubles.

Second: surveys based on direct data collection at school, teacher and student level are particularly expensive. The development of new, reliable measurement instruments, the implementation of the data collection, the appropriate analysis of data and effective reporting require significant resources. As a consequence, for simple financial efficiency reasons, no country can allow unnecessary duplications. **It is a natural expectation of member states that the relevant international players develop a division of work that allows an efficient sharing of scarce resources**.

Cooperation with the OECD and other international agencies, especially the UNESCO, has been, for a very long time, a natural feature of EU activities related with educational data and statistics. The first relevant EU level regulation, adopted by the Council in 1994[51] has already stressed that "*the development of education and training statistics within the framework of the European Union should continue to take account of the existing and sometimes worldwide collections of data undertaken by UNESCO and the OECD in particular, as well as to involve collaboration with these bodies where possible*". A more recent relevant regulation by the Council and the Parliament on the production and

---

[51] Council Resolution of 5 December 1994 on the promotion of education and training statistics in the European Union (94/C 374/02).

development of statistics on education and lifelong learning adopted in 2008[52] stressed again that "*whenever possible, the Commission (Eurostat) shall seek cooperation with the UIS,[53] the OECD and other international organisations with a view to ensuring international comparability of data and to avoid duplication of effort, in particular as regards the development and improvement of statistical concepts and methods and the delivery of statistics by the Member States.*"

One of the most important forms of international cooperation in this field is the system of "UOE data collection" which is a coordination effort of the UNESCO, the OECD and the EU to collect data for international educational statistics in the member countries. As the regulation adopted by the Commission in 2011 (implementing the 2008 Council and Parliament regulation)[54] stated "*data shall comply with the definitions and concepts as stated in the detailed guidelines for the UNESCO/OECD/Eurostat data collection on education systems*".[55] The same document also stressed that "*implementing measures for production of statistics on education and training systems should take account of the potential burden on educational institutions and individuals and of the latest agreement between the UNESCO Institute for Statistics (UIS), the Organisation for Economic Cooperation and Development (OECD) and the Commission (Eurostat) on concepts, definitions, data processing, periodicity and deadlines for transmission of results*." This statement was repeated in a second related regulation adopted by the Commission two years later in 2013.[56] In fact, for the last one or two decades **the costs and administrative burdens caused by international educational data collections or surveys, borne by national administrations, has been increasing significantly, which makes international cooperation and coordination in this area a high level priority.**

3.2. A partnership facing challenges

The history of the cooperation between the European Union and the OECD in the field of educational evaluation shows, however, that this goal has not always been easily achieved. The challenges that this cooperation might face can be understood only in the light of the history of this cooperation which has not always been unproblematic. In fact, countries could not always resist the temptation of playing out one of these international players against the other when they were not satisfied with the action or the conceptual lines of one of them. In fact, the conceptual lines and actions of the OECD, as a global organisation, are strongly determined by those non-European countries which are major contributors to its budget, such as the United States, Canada, Australia, New Zealand, Japan and Korea. As a consequence it is natural that what the OECD does in the field of indicators and educational evaluation is not necessarily fully in line with what the member states of the European Union expect and what they can achieve within the European institutional framework.

---

[52] Regulation (EC) No 452/2008 of the European Parliament and of The Council of 23 April 2008 concerning the production and development of statistics on education and lifelong learning. Official Journal of the European Union. 4.6.2008.

[53] UNESCO Institute for Statistics.

[54] Commission Regulation (EU) No 88/2011 of 2 February 2011 implementing Regulation (EC) No 452/2008 of the European Parliament and of the Council concerning the production and development of statistics on education and lifelong learning, as regards statistics on education and training systems.

[55] For these guidelines see, for example, the UNESCO-UIS/OECD/EUROSTAT Data Collection on Education Statistics Manual, Volume 1 (http://www.uis.unesco.org/Library/Documents/uoe-data-collection-education-systems-v1-2013-en.pdf) and Volume 2 (http://www.uis.unesco.org/Library/Documents/uoe-data-collection-education-systems-v2-2013-en.pdf) for the year 2013.

[56] Commission Regulation (EU) No 912/2013 of 23 September 2013 implementing Regulation (EC) No 452/2008 of the European Parliament and of the Council concerning the production and development of statistics on education and lifelong learning, as regards statistics on education and training systems.

The literature focusing on the OECD-EU relations in the field of educational evaluation and indicator development (see, for example, Bonnet et al., 2003; Bottani – Vrignaud, 2005; Grek, 2009; 2015; Lingard – Grek, 2007; Normand, 2010; Lundgren, 2011) is abundant in illustrations of tensions, rivalries and frictions which are often revealed by references to anecdotal evidences. Grek (2009), for example, quotes a Commission officer saying that "*We used to have great competition between the two institutions [OECD and the EC] which was that they were research-based, we were policy-based*", and the same officer, referring to the present, added "*We had some differences but we are working closer and closer together, we are very-very good friends now, there is no conflict.*" It is important to recall these historical and anecdotal evidences because they demonstrate that the cooperation between the EU and the OECD in the field of educational indicators and evaluation has not always been unproblematic and maintaining the current high level and effective partnership still might need specific efforts.

The establishment of the European Network of Policy Makers for the Evaluation of Education Systems in the middle of the nineties during a French presidency was, in fact, a reaction to a crisis of confidence related with the publication of the results of the first OECD survey based on direct measurement of adult competences (Bottani – Vrignaud, 2005). This European policy network was very active during the following decade trying to create a "counterbalance" against the PISA survey which was seen by its founders as "culturally biased". The French "High Council for the Evaluation of Education", which coordinated national activities related with educational evaluation in France between 2000 and 2005 proposed in 2005 that national political leaders "*exert their influence in the choices that international organisations make with regard to the design, timeframe and resources devoted to the surveys, whether at the OECD or in the European Union. They will need to incite the latter develop its own surveys in order to feed into the indicators designed to report on the Lisbon objectives*" as opposed to the indicators system developed earlier by the OECD (HCÉÉ, 2005; p. 3-5).

As the presentation of a research programme with the specific goal of analysing the relationship between the EU and the OECD in the field of education[57] underlined "*these two organisations have had rather different histories of engagement with education*". While the former "*has had an interest in promoting a shared European culture and identity through education*", the latter has shown "*closer alignment with neo-liberal policy direction*". The OECD "*has also had a long history of developing quality indicators in education*" and to use these indicators "*monitoring of education systems' performance*" while in the European Union this type of using indicators in the education sector started only following the launching of the Lisbon Process in 2000. The indicator programme of the OECD (INES) and the publication of Education at a Glance based on this programme were already well established within the OECD, with a longer tradition of country policy reviews assessing the performance of individual countries in different policy areas, including education, when the EU published its first evaluative reports on the progress of its member countries towards the common objectives decided by these countries.

The research programme referred to in the previous paragraph has produced a number of evidences, mostly anecdotal, showing the difficulties of EU-OECD cooperation in using indicators for policy evaluation. One of the studies emerging from this programme (Grek, 2009) quoted, for example, the words of an officer working for one of the agencies of the Commission, underlining that "*the OECD is the main coordinator for the UOE data which is*

---

[57]   See the website of the research project „Transnational Policy Learning: A comparative study of OECD and EU education policy in constructing the skills and competencies agenda" (TRANSPOL): http://www.ces.ed.ac.uk/research/TransPol.

60% of the data that we use" and "*that means that we participate in all the meetings of INES, the scientific committees of OECD. We go to all these meetings and we have a seat and agreement with the OECD, a formal, very formal, an official agreement that the Commission has a seat in all their committees, (…) so those involved in the collection of data at European level or at the international level in OECD tend to be more and more closely related. Also because at EU level it would cost too much money to develop such instruments like PISA. So of course you have to cooperate…*" (p. 7). And the same officer, using very plain words, added: "*we see the very big reports they publish and it is always Australians, Canadians, and Americans that run away with the money…. This has been a problem […for some] European countries for many years (…) they say this is Anglo-Saxon, American controlled organisation, we don't want it. Therefore we should develop a European capability of doing these things…*" (p. 8).

3.3. The necessity and the benefits of cooperation

By the end of the last decade the cooperation between the OECD and the EU became basically unproblematic. One of the reasons of this is certainly what a leading Commission officer expressed in 2008 with these words: "*The growing number of surveys unavoidably also puts increasing financial and organisational strains on national administrations, especially on those of smaller countries. There have therefore been calls for a better coordination of these initiatives in terms of timing, compatibility and methodological approach (….) The Commission will advance its initiatives for a better coordination of survey calendars and contents with the OECD and the IEA in order to avoid overlaps, enhance synergies and increase cost efficiency*" (Clark, 2008).

The key conclusions of the Council related with indicator development and educational evaluation, mentioned earlier, have, in fact, always stressed the importance of cooperation with the OECD or international cooperation in general. The 2005 Conclusions[58] stated that "*there is a need to continue to enhance cooperation with other international organisations active in this field (e.g. OECD, Unesco, IEA), particularly in order to improve international data coherence*". The background documents prepared by the Commission presented detailed concrete proposals of what kind of OECD indicators and survey results would be used to evaluate the progress of the member countries towards the Lisbon goals in the field of education (European Commission, 2004).

The 2007 Conclusions[59] did not mention the OECD explicitly but specified a group of indicators based on existing data (which were provided, among others, by the OECD) and another group "*still in the process of development in co-operation with other international organisations*" (making implicit reference to the PIAAC and TALIS surveys of the OECD). These Council Conclusions endorsed the related proposals of the Commission which were typically making reference to the necessity of cooperating with the OECD in the field of indicator development. The communication of the Commission behind the 2007 Council Conclusions mentioned, for example, explicitly the cooperation with the OECD in the field of the evaluation of the professional development of teachers (TALIS) and adult skills (PIAAC), although at that time it was not yet clear whether the EU would develop its own survey in the latter area or will rely on the PIAAC survey of the OECD being then still in a development phase (European Commission, 2007a). Another key document of the Commission, issued in the same year and stressing the need for more knowledge based

---

[58] Council conclusions of 24 May 2005 on new indicators in education and training (2005/C 141/04).
[59] Council Conclusions on a coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training 2802nd EDUCATION, YOUTH and CULTURE Council meeting. Brussels, 24-25 May 2007.

policy made strong and frequent references to the work of OECD on evidence-based education policies as a good model (European Commission, 2007b).

The cooperation between the European Commission and the OECD is now highly institutionalised: it is based on a formal agreement ("Education and Skills Cooperation Arrangement") by the two parties, in which "*international surveys were identified as one of the main areas of common interest*"[60] (see also box below). The OECD prepares special evaluative reports regularly for the EU similarly to the reports prepared for its member countries, and these are presented in common press conferences. At a common OECD-EU press conference on the EU related data of Education at a Glance the director of the education division of OECD underlined that the cooperation of the two parties has reached a new phase as they do not only collect data together but now they also analyse them together.[61].

Cooperation agreement between the European Commission and the OECD

"The European Commission's Directorate-General for Education and Culture and the OECD's Department for Education and Skills have agreed on a new cooperation arrangement, to join forces in three important aspects of education and skills development: Skills Strategies, Country Analyses and International Surveys. The PISA Programme is a strong component of this cooperation.

The results of the 2012 round of PISA will be officially presented on 3 December in a joint Commission/OECD event in Brussels, representing, similar to the recent launch of the results of the Survey of Adult Skills (PIAAC), a building block of the two institutions' enhanced cooperation. PISA results strengthen the knowledge base of the Commission and, given the prominence and credibility of the international survey, give the Commission's own policy messages more visibility.

The PISA 2012 report provides key insights into the performance of school systems at the EU level, in EU Member States and beyond. The results not only enable comparison at EU level but situate European performance within the broader global context. It provides new evidence on students' skills performance and its development within EU Member States, thereby enabling Member States to assess the success of existing policy reform and to identify the need for future developments. Consequently, PISA has become an important component of the strategic framework for European cooperation in education and training (ET 2020) and a prominent source of information for the Europe 2020 strategy and the European Semester, where it is widely used in fields as literacy, mathematics, early leavers from education and training, low achievers and ICT skills."

Source: European Commission (2013c)

One of the interesting results of this enhanced cooperation is the joint initiative of the OECD and the EU called "Education and Skills Online Assessment", which is an innovative new way to acquire data on skills through a self-assessment instrument filled in on a voluntary basis.[62] The self-assessment instrument, used in this case is the online version of the Survey of Adult Skills (PIAAC) of OECD, and the innovative online platform has been developed with the financial support of the European Commission.

---

[60] See the website entitled „Education and training policies based on evidence" of the European Commission (http://ec.europa.eu/education/policy/strategic-framework/indicators-benchmarks_en.htm).

[61] See the video record of the press conference on the website entitled "EU launch of OECD 'Education at a Glance'"of the European Commission (https://scic.ec.europa.eu/streaming/index.php?es=2&sessionno=84f74ce4511e0c9531af1182fb636f0f).

[62] See the website entitled „Education & Skills Online Assessment" of the OECD here: http://www.oecd.org/skills/ESonline-assessment.

In the context of this study it is important to mention that recently the European Commission initiated a more intensive cooperation between those OECD member countries which are members of the European Union. This enhanced cooperation is explicitly encouraged by a recent analysis of the Commission recognising the OECD as a "*major knowledge provider in the field of education with its Education and Skills Directorate leading on a number of international surveys*". This document proposes that the Commission "*organises regular meetings with representatives of the Member States in order to exchange opinions on strategic cooperation with OECD; involvement in surveys and other studies; and use of Erasmus+ funding to support EU's participation in OECD projects*" (European Commission, 2015). In accordance with this the Commission is now facilitating a dialogue between representatives of those OECD member countries which are members of the EU and provides a framework for them to discuss the relevant themes prior to the meetings of the Education Policy Committee of the OECD. [63] These meetings can be hosted and chaired by any Member State volunteering to do so. Although the representative of the European Commission is a permanent member of the education related bodies of OECD, this, in itself, does not constitute a mandate for the Commission to actually represent the Member States in the discussions within OECD education related bodies. Nonetheless, to the extent that these new meetings result into enhanced Member States' capacity to influence OECD's decisions, or to express convergent opinions, this initiative might become a more effective way of influencing decisions on those OECD led surveys and indicator development activities which produce indicators to be used by the EU.

The representatives of the EU member countries being also members of the OECD are now invited by the Commission to discuss the relevant themes prior to the meetings of the Education Policy Committee of the OECD. Although the representative of the European Commission is a permanent member of the education related bodies of OECD, this, in itself, is not enough to give sufficient strength to the perspectives of the EU in the discussions within these bodies if the delegates of the member countries do not express convergent opinions. **This new form of coordination might become an effective way of influencing decisions on those OECD led surveys and indicator development activities which produce indicators to be used by the EU**.

This type of coordination is particularly important in the context of imperfect domestic policy coordination in many countries which sometimes leads to the expression of divergent views by the same country in the OECD and in the EU. As a civil servant with several years of experience in this area expressed: "it often happens that a country supports something in the OECD but, at the same time, it does not give its support to put the issue on agenda in the EU" because in the case of the OECD "the given issue is considered as professional, and remains in the remit of sectoral ministries while in the case of the EU it is subordinated to a national foreign policy coordination" and "it might become part of broader package deals".[64]

As we have seen, survey data and indicators produced by the OECD play an increasingly important role in the system of indicators used for education policy coordination by the EU. A recent 25 pages long Commission analysis of "key evidence gaps in priority education policy areas" mentioned the OECD 49 times.[65] The document mentioned seven areas where

---

[63]   This is based on the personal information of the author of this study.
[64]   Source: a personal interview of the author of this paper.
[65]   Source: the personal documentation of the author of this study.

evidence gap could be found[66] and, except for one, OECD was mentioned in each as an important source of data.

For several years the EU has been contributing financially to the implementation of a number of OECD surveys through the budget of its education programmes. The 2014 annual work programme for the implementation of the Erasmus+ programmes, for example, underlined that "*cooperation with international organisations with highly recognised expertise and analytical capacity will strengthen the impact and added value of evidence based policies in the area of education, training and youth*" and mentioned PISA, PIAAC and TALIS as surveys to be supported. The chapter of the work programme on cooperation with the OECD stated that the related actions are "*part of a global framework of cooperation with the OECD Directorate of Education*" and they "*will aim at a more fruitful alliance between OECD's stronger analytical capacity and the Commission's political and financial capacity regarding country analysis in the field of education and training*". According to this work programme it was planned that "*the budget will cover a part of the expenses of the OECD country reviews for the countries previously identified as priority countries*" specifying also that "*the maximum Commission co-financing rate will be 80%*". Recognising the "*considerable analytical expertise of the OECD*" financial support from the Erasmus+ programme was also planned "*to produce additional evidence for topics of particular relevance to the EU, such as skills development at different age levels or the returns to skills*" and the co-financing rate was set at 80% here as well. Beyond this, a number of other areas eligible for financial support were mentioned in the work programme (European Commission, 2013d).

Similar provisions appeared also in the 2015 annual work program. This latter document made explicit reference to "*international studies and assessment tools*" underlining that "*both the OECD and the European Commission carry out international studies in the field of education and training*", and stressing that "i*n some cases both sides can get best results through joint actions, thus avoiding overlapping or duplicated work*". The 2015 Erasmus+ work programme also stressed that in the field of international assessments "*OECD is considered to be the only body technically competent to carry out these analysis and actions*" because "*these activities require specific technical competences as well as administrative capacity - including the capacity to analyse the issue in the context of world leading economies - which only OECD has, in order to be credible for the Member States and for the countries participating in these actions*" (European Commission, 2014)

These planning documents of the European Commission make it particularly clear that the basis of cooperation between the EU and the OECD in the field of educational assessment and evaluation is the general recognition of the unique capacities of OECD to produce reliable data in a number of strategic areas and its analytical capacity. This seems to be recognised not only by the European Commission but also by the majority of EU member countries. The high proportion of EU member countries actively participating in the educational surveys of the OECD, in spite of the relatively high voluntary costs of this, demonstrate that they see these surveys as important sources of feedback on the performance of their education systems.

It is important to stress, however, that the high level participation of EU member countries in OECD surveys cannot predict either their willingness to participate in similar EU led surveys or their support for the use of OECD data by the EU. The EU and OECD are fundamentally different policy environments and what receives support in one context is not necessary supported in the other. **In the context of the emerging EU policy**

---

[66]   Investment, innovation, inequalities, teachers, key competences, early childhood education and mobility.

coordination mechanisms indicators produced by evaluation systems can be used as tools of policy coordination which need higher level legitimacy and stronger legal foundations which also implies the involvement of social partners and relevant political bodies. This is particularly relevant in the context of the new instruments of enhanced policy coordination since the 2008 financial and economic crisis.

CONCLUSIONS

Educational evaluation is a function which, over last few decades, has been increasingly institutionalised as a well identifiable subsystem of national education systems with key actors and institutional mechanisms and with national policies directed to develop and operate this subsystem. Since the middle of the last decade improving the efficiency and effectiveness of education systems has become an important strategic goal of the European Union,[67] and strengthening assessment and evaluation has been increasingly seen as a key instrument to achieve this strategic goal. The creation of coherent educational evaluation systems and making them work more effectively has become a strategic policy goal in most European countries as demonstrated by a number of EU surveys and publications, and particularly the OECD thematic review on educational assessment and evaluation. The latter has also produced a workable definition of educational evaluation systems ("frameworks") as being composed of a number of interrelated elements, such as, for example, student assessment, school evaluation, the evaluation of teachers and school leadership, system evaluation and a few secondary but also important components, such as programme or policy impact evaluation (as presented in *Figure 1*).

Educational evaluation systems play a key role in assuring the effectiveness and quality of education and the European Union has already had a long and relatively rich history of supporting member states and cooperation between member states in this area. This has been significantly reinforced by the emergence of education policy coordination mechanisms following the adoption of the Lisbon agenda in 2000 and by the use of measurable indicators for policy coordination, as well as by the increasing stress on evidence based policy making. This trend has been significantly reinforced by the recent developments following the 2008 financial and economic crisis which led to the emergence of additional stronger policy coordination instruments such as the European Semester with its specific education sector ramifications, the peer review processes focusing on the implementation of education sector related country-specific recommendations and the strengthening of the strategic focus of the TWGs supporting the implementation of the ET2020 strategy.

All these have been generating actions that have made the European Commission a key potential institutional actor also in the field of educational evaluation. **The policy coordination instruments developed during the last one and a half decade make it possible for the European Union to play a more pro-active role and to provide more support for members states to develop their national educational evaluation systems.**

In the future, the development of European cooperation in the field of educational evaluation could follow two major lines. One is the further (technical) development of already existing European level tools and instruments, and the other is giving more support to the member states to develop further their own national educational evaluation systems. These are two distinct, however, strongly interconnected action lines.

---

[67] See particularly the Communication from the Commission to the Council and to the European Parliament of 8 September 2006 on Efficiency and equity in European education and training systems; Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 15 November 2007, on improving the quality of teacher education. Official Journal of the European Union. 12.12.2007; European Parliament resolution of 27 September 2007 on efficiency and equity in European education and training systems.

As for the first (the further development of already existing tools and instruments) one of the major challenges, and also one of the main opportunities, seems to be the fact that no clear borderlines can be established between policy coordination and educational evaluation. The European Commission is developing and using indicators based on measurable data for policy coordination in the framework of the Open Method of Coordination, serving previously the Lisbon strategy and now the EU2020 strategy. These data, and particularly the instruments used to produce them, can naturally be used also for educational evaluation purposes. This makes the European Commission a major actor in educational evaluation in Europe even if this is not the primary goal and if the responsibility for operating educational evaluation systems should rest with the member states. There is a permanent pressure on the Commission to improve continuously the instruments and tools it uses for policy coordination and, indirectly, for educational evaluation. This makes it necessary both the development of internal capacities (such as CRELL and other relevant agencies) and an intensive cooperation with external players, such as international organisations active in this area. **The scarcity of resources and also the increasing burden on member states related, for example, with domestic data collection, make it absolutely necessary that a good division of work between the internal and the external agencies be established**.

For several reasons the most important partner of the EU in the field of developing indicators, collecting data and analysing them – be it for policy coordination or educational evaluation purposes – is the OECD. There is already an enhanced cooperation between the European Commission and the OECD in the field of indicator development and policy evaluation/analysis, and it can be expected that this cooperation will become even more intensive in the future. After two decades of cooperation in the field of developing and using indicators to evaluate the performance of national education systems there are more similarities than differences between the approaches used by the EU and the OECD, in spite of the fact that the latter is a global organisation with several of its most influential members being non-European states. This is not only an answer to our first research question about similarities and differences, but also a statement leading to a number of related recommendations (see the next section).

The launching of major new, regular internal surveys at the level of the EU, based on school, teacher or student level data collection (such as, for example, the PISA survey of the OECD) would be a major and high risk decision because of the high costs of these surveys and because of the inherent risks associated with them, related with conceptualisation, the development of appropriate measurement instruments and willingness or readiness of member states to participate in such surveys. Such surveys can be justified when the area to be measured is of particularly high political importance (such as, for example, the development of European key competences for lifelong learning or the fight against early school leaving and for inclusive education) and when the distance between the specific European needs and the already existing external surveys is too large. The examples of earlier initiatives to implement such surveys show that they can be successful only if these conditions are given, and, as a consequence, a sufficient number of member states might be expected to support the initiative. **On the basis of existing initiatives and experiences and taking the relevant political priorities into account entrepreneurial competences is the area where a European survey based on school and pupil level data collection seems to be the most promising**.

As for the second action line (supporting the member states to develop further their national educational evaluation systems) this seems already to have two major components. One component is policy support to develop national educational evaluation

systems; the other is financial and technical assistance given for the development of new assessment and evaluation instruments at European level which can, subsequently, be used also at national level. In certain areas the EU has already provided policy support for the development of national educational evaluation systems: the 2001 Recommendation of the Council and the Parliament on quality evaluation is probably the best example for this. This was also a good example of how consensus can be created at expert level through relevant pilot projects and how this could lead to a common policy action in a field of high level sensitivity.

The other component of supporting member states in developing further their national educational evaluation systems is the provision of technical assistance to develop and pilot new assessment and evaluation instruments at EU level which can subsequently be adopted by national level users. In this field the EU has not yet become a major actor: the only major exception is perhaps the successful survey of language competences which led not only to the creation of high quality new measurement instruments but, and this might be even more important, also to the transfer of technical knowledge between countries in this area. There might be a major development potential in this area if the EU creates appropriate frameworks in which national technical expertise in educational assessment and evaluation can be continuously shared and developed further.

It is important to stress that the two components of the second action line (policy development and technical assistance) are strongly interrelated. The latter, if not placed in an appropriate policy framework, might become dysfunctional and might lead to distortions in the development of national education evaluation systems. **Only an appropriate policy framework can avoid, for example, losing the balance between qualitative and quantitative approaches or between accountability and developmental/formative functions**.

One of the research questions of this study has been about the feasibility to further develop the evaluation of education systems and policies at the European level in a more comprehensive way. This study has shown that there are several possible ways to make further development in this area. The development of common policy frameworks, for example – possibly in a process leading ultimately to a new Recommendation of the Council and the Parliament –, would probably improve synergies between national educational evaluation systems and common education policy priorities. If, for example, the reduction of the proportion and the number of early school leavers is a top community priority, as it is the case, this could have a stronger influence on the operation of national educational evaluation systems. The 2001 Recommendation is again a good example: this policy document made a remarkable linkage between school evaluation and community policy priorities integrating, for example, some principles of the emerging lifelong learning policy of the European Union or related equity principles into the quality evaluation framework. Similar synergies could be created between the development of educational evaluation systems and the policy goal of reducing early school leaving.

RECOMMENDATIONS

Although the recommendations below are addressed mainly to European level decision makers some of them they might be relevant also at member state level. Most of them are relevant at the level of policy development, although some of them might have relevance also at the level of implementing policies.

1. **The European Parliament and the European Commission should initiate a systematic reflection and debate on educational evaluation** taking into account the relevant developments at both national and European level, and using, as one of the possible inputs, the outcomes of the thematic review of the OECD on educational assessment and evaluation. This reflection should seek answers to questions like:

   - Should educational evaluation systems be described as relatively autonomous subsystems of education demanding increased policy attention and intervention?
   - What are the key components of educational evaluation systems, how they are interrelated and what kind of balance should be established between them?
   - What is the impact of educational evaluation systems on the effectiveness and quality of education systems?
   - What is the optimal balance between the qualitative and quantitative approaches of educational evaluation and between the functions of development and accountability?
   - What are the key components of national policies aimed at making educational evaluation systems work more effectively?
   - What is the impact of educational evaluation policies on the implementation of sector specific policy goals in various areas, such as, for example, curriculum, equity and inclusion, teacher professionalism or funding efficiency?
   - What role the European Union could play in assisting member countries to make their educational evaluation systems more effective and more efficient?
   - What is the role of social partners in educational evaluation at European and member state level?

2. **The development of a European educational evaluation policy should take into account the multilevel and diverse nature of educational evaluation**. European level assessment and evaluation tools could be used not only by member countries but also by schools and teachers. Member states could be assisted in developing assessment and evaluation instruments used either at national (e.g. standardized tests or school evaluation protocols) or at school and classroom level (e.g. student portfolios). European action should not focus exclusively on one single component of educational evaluation systems but should take into account the complexity of educational evaluation and support all relevant components of evaluation systems. The development of assessment tools to be used by teachers at school level (similar to the European Language Portfolio) could be one important form of European action in the field of educational evaluation.

3. **The European Commission should pursue the indicator development work preferably in those areas which are not yet covered by other international organisations**, namely the OECD and the IEA. In certain areas the indicator work should be increasingly based on the direct measurement of student competences. In a limited number of key areas – in line with the strategic priorities of the European Union in school education and in line with the 2006 Recommendation on key competences – the European Commission should develop new measurement

instruments for the direct measurement of student competences and conduct regular surveys. The development work and the implementation of surveys should be conducted under the supervision of a specialised, competent European agency, such as CRELL. The international and national costs of such surveys could be estimated on the basis of existing OECD surveys, similarly to the way the costs of the EILC survey was estimated by the Commission,[68] and the real costs of the EILC survey could also provide a good estimate.

4. **The development and the use of indicators for policy coordination purposes should be conceived so that, if possible, they could also contribute to the development of the educational evaluation system at European level**. When indicators used for system level evaluation require multilevel aggregation and analysis based on micro data, such as school level data on drop outs in the case of early school leaving, the micro level data could also be used for educational evaluation purposes both at national and European level. The implementation of the community policy of reducing early school leaving, which supports explicitly the evidence based approach, should be used also to support the development of national systems of educational evaluation. In this case, for example, school level micro data on drop-outs could also be used for school evaluation by national evaluation agencies.

5. **Synergies between the development of national educational evaluation systems (including EU level support for this) and the implementation of common European policy priorities in education should be strengthened**. Educational evaluation can provide powerful support for the implementation of specific policies, such as, for example, policies to promote the development of 21st century competences or to reduce early school leaving. European actions supporting the development of national educational evaluation systems and national policies in this area should be guided by the well-established common policy priorities in the education and training sector and should use educational evaluation as a major instrument for the implementation of these priorities.

6. **The further development of European level direct measurement tools should be guided by the strategic considerations, endorsed both by the Parliament and the Council**, such as the development of transversal competences across European education systems. The measurement of discipline-related competences is already appropriately covered by national assessment systems. A European added value could be expected particularly from the common development of innovative new instruments for measuring transversal competences and from large scale, sample based surveys based on the direct assessment of these competences at student level.

7. **In each relevant competence area specific approaches are required based on earlier development work and the experiences of earlier pilot initiatives**: The following areas seem to be particularly relevant:

---

[68] See footnote 40.

Foreign languages competences
In this case the already existing survey of foreign language competences could be continued and made regular. A major goal might be the participation of each member countries of the European Union.

Entrepreneurship competences
This should be a priority area for development in line with related resolution of the European Parliament on promoting youth entrepreneurship through education and training[69] which stressed that the impact of entrepreneurship education should be measured and a new European indicator based on this measurement should be created.

Learning to learn competences
In this case probably an entirely new development work should be started. This area should be conceived as an experimental field where further conceptualisation is needed. Development work should be based on a profound analysis of the failure of previous efforts.

Digital competences
Relying on earlier CRELL work[70] and in line with the relevant proposals of the European Commission (2013b) a regular survey of digital competences could be initiated.

Citizenship competences
Using the experiences of the earlier IEA surveys and relying on earlier CRELL work[71] the European Commission could initiate a regular survey of citizenship competences. This should include a specific European dimension, including the measurement of specific European citizenship competences (knowledge, skills and attitudes).

8. **The creation of a European survey based on direct school and pupil level data collection in the field of entrepreneurial competences should be considered.** On the basis of existing initiatives and experiences and taking into account the relevant political priorities this is the area where such an initiative seems to be the most promising. This could be made with the active involvement of social partners, including the representatives of industry and the Commission's directorate responsible for enterprise and industry which could contribute both to the financial sustainability of the project and to make it particularly open to innovative solutions.

9. **The European Commission should coordinate better the activities of those OECD Member States which are members of the European Union** so that they are more proactive and they initiate common actions within the relevant OECD bodies in order to fulfil data-gaps with the support of OECD. This could be based on the coordination activity already initiated by the "Studies, Impact Assessments, Analysis and Statistics" unit of the Directorate-General for Education and Culture of the Commission which has led to a series of webinars preparing the meetings of the Education Policy Committee of the OECD with the participation of several EU member countries. This coordination activity should be extended to each relevant body, especially to the boards of participating countries of the major OECD educational surveys.

---

[69] See the European Parliament resolution of 8 September 2015 on promoting youth entrepreneurship through education and training.
[70] See, for example, Ala-Mutka (2011).
[71] See, for example, Hoskins et al. (2012).

10. **The European Commission should continue to support the participation of non-OECD member countries in those OECD programmes (such as PIAAC, TALIS, AHELO and other programmes to be developed in the future) which have a potential to produce good quality data for relevant existing or possible EU indicators**. Parallel to this, the Commission should play a more active role in the steering bodies of these programmes both directly expressing the specific European needs and supporting cooperation between participating EU member countries.

11. **The cooperation between the European Commission and the OECD should be framed by a regularly renewed formal agreement endorsed by the relevant political decision making bodies**. This agreement should specify a number of key areas where cooperation is unavoidable and desirable, such as:
    - the evaluation of national assessment and evaluation systems and policies
    - the evaluation of the outcomes of community education policies
    - the development of capacities in the field of designing appropriate measurement tools and the development of analytical capacities
    - exploring new areas of measurement and designing innovative tools to assess hard-to-measure areas such as, for example, collective problem solving capacities
    - the development of online data collection tools supporting surveys at school, teacher and student level
    - applying the "big data" and analytics approach to explore existing databases
    - the active participation of the European Commission in all bodies related with indicator development, data collection and analysis in the field of education

12. **The member countries of the European Union should be continuously supported in their efforts to establish and operate comprehensive evaluation and assessment frameworks in line with the relevant European education policy priorities and with the relevant OECD recommendations.** The adoption of a new European recommendation could be envisaged in this area complementing the earlier recommendation of quality evaluation in school education adopted in 2001.[72] This recommendation could support the further development of national assessment and evaluation frameworks in school education, including increased European level cooperation in this area. **In order to intensify policy cooperation in this area the creation a new policy network on educational assessment and evaluation could be envisioned**.

13. **The evaluation of national assessment and evaluation systems and policies could be included into the regular monitoring of the performance of national education systems**. Based on a common understanding of the key components of national assessment and evaluation systems and on the development of common standards for assessment and evaluation practices the community could give regular feedback to its members on how effective their national educational assessment and evaluation systems is, and make recommendations on how to develop further these systems. **The development of national educational assessment and evaluation systems should be one of the explicit goals of community development activities funded from the Erasmus+ education programme and from the structural funds used for modernising education systems**.

---

[72] Recommendation of the European Parliament and of the Council of 12 February 2001 on European cooperation in quality evaluation in school education. (2001/166/EC).

14. **The European Commission should support initiatives aimed at introducing new innovative solutions into national educational evaluation systems in the member states.** Innovative solutions could cover areas like, for example,

   (1)   the use of effective new instruments to assess cross-curricular or transversal competences, including qualitative instruments used by practitioners at school level

   (2)   the use of advanced ICT-based instruments for assessing student outcomes, including

   (2.a) the use of computers, advanced assessment software and online technologies for testing

   (2.b) voluntary online testing services offering an opportunity for people/students to assess their own skills while collecting data for analysis

   (3)   the use of analytics or "big data" approaches to explore large databases emerging from national assessments,

   (4)   innovative ways of reporting assessment and evaluation results,

   (5)   innovative policies creating effective incentives to make schools and teachers active users of assessment and evaluation results.

REFERENCES

- Ala-Mutka, Kirsti (2011), *Mapping Digital Competence: Towards a Conceptual Understanding*. European Commission Joint Research Centre. Institute for Prospective Technological Studies.

- AEA (2012), *European Framework of Standards for Educational Assessment 1.0*. The Association of Educational Assessment – Europe. Edizioni Nuova Cultura, 2012

- Araújo, Luísa - da Costa, Patrícia Dinis (2013), *The European Survey on Language Competences: School-internal and External Factors in Language Learning*. European Commission Joint Research Centre Institute for the Protection and Security of the Citizen. Luxembourg: Publications Office of the European Union

- Ashton, Karen. (2013), *Reflections on the European Survey on language competences: Looking back, looking forwards*. Cambridge English Research Notes. (52), 20-23 (online: http://www.cambridgeenglish.org/images/139525-research-notes-52-document.pdf)

- Ashton, Karen (2014), *Reflections on international comparative education survey methodology: a case study of the European Survey on Language Competences*. Compare (online: https://www.academia.edu/9033953/Reflections_on_international_comparative_education_survey_methodology_a_case_study_of_the_European_Survey_on_Language_Competences)

- Bonnet, Gérard (2006), *French Educational Reform: Challenges and Perspectives*. in: Rotte Ralph (ed.): International Perspectives on Education Policy. Nova Science Publishers. New York. p. 57-67

- Bonnet, G., Daems, F. ; de Glopper, C. ; Horner, S. ; Lappalainen, H-P. ; Nardi, E. ; Rémond, M. ; Robin, I. ; Rosen, M. ; Solheim, R. G. ; Tonnessen, F-E. ; Vertecchi, B. ; Vrignaud, P. ; Wagner, A. K. ; White, J., (2003), *Culturally Balanced Assessment of Reading (C-BAR)*. Ministère de de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche, DEP Édition diffusion, Paris

- Bogdandy, Armin von – Goldmann, Matthias (2008), *The Exercise of International Public Authority through National Policy Assessment. The OECD's PISA Policy as a Paradigm for a New International Standard Instrument*. International Organizations Law Review 5. pp. 1–58

- Bottani N. - Vrignaud P. (2005), *La France et les évaluations internationales*. Rapport pour le Haut Conseil de l'Evaluation de l'Ecole. Paris. La documentation Française

- Bottani, Norberto (2006), *Le niveau d'huile, le moteur et la voiture: les enjeux d'une évaluation de la qualité de l'enseignement par les indicateurs*. Éducation et Sociétés. No18/2. pp. 141-161

- Burger, Roland A. - Husmann, Elmar – Rizzo, Florence (2013), *ELIG Position Paper on "Opening up Education"*. European Learning Industry Group (online: http://www.elig.org/fileadmin/user_upload/files/we-share/publications/ELIG_PP_openupedu_20131205_03.pdf)

- Caena, Francesca (2011), *Teachers' core competences: requirements and development*. Literature review. European Commission. Directorate-General for Education and Culture

- Clark, Gordon (2008), *The key role of indicators and benchmarks supporting the future strategic objectives of European co-operation in education and training*. Speech at the French EU Presidency Conference „International comparison of education systems: A European model". Paris 13-14 November 2008

- Daugherty, Richard - Black, Paul - Ecclestone, Kathryn - James, Mary – Newton, Paul (2011), *Policy and Practice Assessment of Significant Learning Outcomes*. in: Berry, Rita – Adamson, Bob (eds.): Assessment Reform in Education. Springer. pp. 165-184

- EACEA (2015), *Entrepreneurship Education in Europe. 2015 edition – Final scoping note*. December 2014. Education, Audiovisual and Culture Executive Agency. European Commission. DG EAG

- Endrizzi, Laure – Rey, Olivier (2008), *L'évaluation au coeur des apprentissages*. Dossier d'actualité No. 39. (online: http://ife.ens-lyon.fr/vst/LettreVST/39-novembre-2008.php?onglet=pdf)

- European Commission (1995), *Teaching and learning — towards the learning society*, *White Paper*. Office for Official Publications of the European Communities

- European Commission (2001), *European Report on the Quality of School Education: Sixteen Quality Indicators. Report based on the work of the Working Committee on Quality Indicators.* Luxembourg: Office for Official Publications of the European Communities, 2001

- European Commission (2003a), *Final list of indicators to support the implementation of the Work programme on the future objectives of the education and training systems*. Results of the consultation of the working groups. Standing Group on Indicators and Benchmarks

- European Commission (2003b), *Entrepreneurship in Europe*. Green Paper. Brussels, 21.1.2003 COM(2003) 27 final

- European Commission (2004), *New indicators on education and training*. Commission Staff Working Paper. Brussels. 29.11.2004. SEC(2004) 1524

- European Commission (2005), *The European Indicator of Language Competence*. Communication from the Commission to the European Parliament and the Council. Brussels. 1.8.2005. COM(2005) 356 final

- European Commission (2007a), *A coherent framework of indicators and benchmarks for monitoring progress towards the Lisbon objectives in education and training*. Communication from the Commission. Brussels. 21.2.2007. COM(2007) 61 final

- European Commission (2007b), *Towards more knowledge-based policy and practice in education and training*. Commission Staff Working Document. Brussels. 28.08.2007. SEC(2007) 1098

- European Commission (2010a), *Assessment of key competences*. Draft Background Paper for the Belgian Presidency meeting for Directors-General for school education. 8 July 2010. Directorate-General for Education and Culture

- European Commission (2010b), *Foundations and structures for a Joint Assessment Framework (JAF), including and Employment Performance Monitor (EPM) to monitor the Employment Guidelines under Europe 2020*. Council of the European Union. Social Affairs and Equal Opportunities DG - The Employment Committee - The Social Protection Committee

- European Commission (2012a), *Rethinking Education: Investing in skills for better socio-economic outcomes*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Strasbourg. 20.11.2012. COM(2012) 669 final

- European Commission (2012b), *Assessment of Key Competences in initial education and training: Policy Guidance Accompanying the document Communication from the Commission Rethinking Education: Investing in skills for better socio-economic outcomes*. Commission Staff Working Document. Strasbourg. 20.11.2012 SWD(2012) 371 final

- European Commission (2012c), *First European Survey on Language Competences*. Executive Summary.

- European Commission (2012d), *First European Survey on Language Competences*. Final Report.

- European Commission (2013a), *Reducing early school leaving: Key messages and policy support*. Final Report of the Thematic Working Group on Early School Leaving

- European Commission (2013b), *Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. SWD (2013) 341 final. Brussels. 25.9.2013

- European Commission (2013c), *PISA 2012: EU performance and first inferences regarding education and training policies in Europe. Directorate-General for Education and Culture*. Brussels (online: http://ec.europa.eu/education/policy/strategic-framework/doc/pisa2012_en.pdf)

- European Commission (2013d), *2014 annual work programme for the implementation of 'Erasmus+': the Union Programme for Education, Training, Youth and Sport*. C(2013)8193 of 27 November 2013

- European Commission (2014), *2015 annual work programme for the implementation of 'Erasmus+': the Union Programme for Education, Training, Youth and Sport*. C(2014)6856 of 30 September 2014

- European Commission (2015), *Commission staff working document accompanying the document "New priorities for European cooperation in education and training. Draft 2015 Joint Report of the Council and the Commission on the implementation of the Strategic Framework for European cooperation in education and training (ET 2020)"*. Communication from the Commission to the European Parliament, The European Economic and Social Committee and the Committee of the Regions.

- European Commission/EACEA/Eurydice (2015), *Assuring Quality in Education: Policies and Approaches to School Evaluation in Europe*. Eurydice Report. Luxembourg: Publications Office of the European Union

- Ferrari, Anusca (2013), DIGCOMP: *A Framework for Developing and Understanding Digital Competence in Europe*. JRC-CRELL

- Flisi , Sara – Goglio, Valentina – Meroni, Elena (2014), *Monitoring the Evolution of Education and Training Systems: A Guide to the Joint Assessment Framework*. JRC-CRELL

- Fredriksson, Ulf - Hoskins, Bryony (2007), *The development of learning to learn in a European context*. The Curriculum Journal. Vol. 18. No. 2. pp. 127–134

- Fredriksson, Ulf (2013), *Learning to learn – what is it and can it be measured? Metacognition and Self-Regulated Learning Colloquium*. Paris, October 15, 2013. PowerPoint presentation (online: http://curriculumredesign.org/wp-content/uploads/L2L-Paris-14-15-October-Compatibility-Mode.pdf)

- GHK (2011), *Study on Support to Indicators on Entrepreneurship Education*. Final Report. Framework Contract No. EAC 19/06

- Grek, Sotiria – Ozga, Jenny (2010), *Governing education through data: Scotland, England and the European education policy space*. British Educational Research Journal. Vol. 36, No. 6. pp. 937–952

- Grek, Sotiria (2009), *The role of the OECD as an agent of Europeanization: problematisation and change in education governance in Europe*. ESRC Research Project on Transnational Policy Learning Paper presented to Edinburgh's Europa Institute seminar: Practicing EU Government: Problematisation (online: http://www.ces.ed.ac.uk/PDF%20Files/TPLWP1.pdf).

- Grek, Sotiria (2015), *Europe and its emerging relationship with the OECD*. in: Lawn, Martin - -Normand, Romuald (eds.): Shaping of European Education Interdisciplinary approaches. Routledge. pp. 14-31

- HCÉÉ (2005), *France and International Evaluation of Student Achievement*. Avis du HCÉÉ N° 16 – May 2005. Haut Conseil de l'évaluation de l'école (High Council for the Evaluation of Education)

- Hislop, Harold (2013), *Applying an Evaluation and Assessment Framework: An Irish Perspective*. Irish Presidency of the Council of the European Union 2013. Presidency Conference: Better Assessment and Evaluation to Improve Teaching and Learning

- Hoskins, Bryony - Jesinghaus, Jochen - Mascherini, Massimiliano - Munda, Giuseppe - Nardo, Michela - Saisana, Michaela - Van Nijlen, Daniel - Vidoni, Daniele – Villalba, Ernesto (2006), *Measuring Active Citizenship in Europe. Institute for the Protection and Security of the Citizen*. CRELL Research Paper 4.

- Hoskins, Bryony – Fredriksson, Ulf (2008), *Learning to Learn: What is it and can it be measured?* Centre for Research on Lifelong Learning (CRELL)

- Hoskins, Bryony – Villalba, Cynthia M.H. – Saisana, Michaela (2012), *The 2011 Civic Competence Composite Indicator (CCCI-2). Measuring Young People's Civic Competence across Europe based on the IEA International Citizenship and Civic Education study*. European Commission Joint Research Centre. Institute for the Protection and Security of the Citizen

- Kollias, Andreas (2011), *Learning to learn in vocational education and training from an equity perspective: a conceptual framework*. The FARE Project: Bruselas, Comisión Europea (online: http://promitheas.iacm.forth.gr/e-demos../images/docs/fare/learning_to_learn.pdf)

- Lawn, Martin (2011), *Standardizing the European Education Policy Space*. European Educational Research Journal. Volume 10. Number. pp. 259-272

- Lingard, Bob – Grek, Sotiria (2007), *The OECD, Indicators and Pisa: an Exploration of events and Theoretical Perspectives*. ESRC/ESF Research Project on Fabricating Quality in Education. Working Paper 2. (online: http://www.ces.ed.ac.uk/PDF%20Files/FabQ_WP2.pdf)

- Lucas, Bill – Claxton, Guy (2009), *Wider skills for learning: What are they, how can they be cultivated, how could they be measured and why are they important for innovation?* (online: https://www.nesta.org.uk/sites/default/files/wider_skills_for_learning_report.pdf

- Lundgren, Ulf P. (2011), *PISA as a political instrument: One history behind the formulating of the PISA programme*. in: Pereyra, Miguel A. – Kotthoff, Hans-Georg – Cowen, Robert (eds.): PISA under examination. Changing Knowledge, Changing Tests, and Changing Schools. Sense Publishers. pp. 17-30

- MacBeath, J. - Meuret, D. - Jakobsen, L - Schratz, M. (1999), *Evaluating quality in school education*. A European pilot project. Final report. European Commission

- Moberg, Kåre - Vestergaard, Lene - Fayolle, Alain - Redford, - Cooney, Thomas - Singer, Slavica - Sailer, Klaus – Filip, Diana (2014), *How to assess and evaluate the influence of entrepreneurship education*. A report of the ASTEE project with a user guide to the tools. The Danish Foundation for Entrepreneurship – Young Enterprise

- Normand, Romuald (2010), *"L'obligation de résultats et les recompositions de l'État évaluateur en éducation. La trajectoire française*. Présenté au séminair EHES Benchmarking. Manuscript (online: http://www.meshs.fr/datas/files/docs/sem/2009-10/textenormandfr.doc)

- Nóvoa, António – Carvalho, Luís Miguel – Yanes, Cristina (2014), *La comparaison comme politique: le tournant du début du 21e siècle*. Revue suisse des sciences de l'éducation. 36 (2). pp. 265-282

- OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*. OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris

- OECD (2014), *Data-driven Innovation for Growth and Well-being*. Interim Synthesis Report

- OECD (2015a), *Education Policy Outlook 2015. Making Reforms Happen*. OECD Publishing. Paris

- OECD (2015b), *Skills for Social Progress. The Power of Social and Emotional Skills.* OECD Publishing. Paris

- OECD (2015c), *Data-driven Innovation. Big Data for Growth and Well-Being*. OECD Publishing. Paris

- Pépin, L. (2006), *The History of European Cooperation in Education and Training. Europe in the Making - an example*. European Commission. Office for Official Publications of the European Communities.

- Snyder, Kristen M. (2007), *The European Education Quality Benchmark System: helping teachers to work with information to sustain change*. European Journal of Education. Vol. 42, No. 3. pp. 425-435

- Souto-Otero, Manuel (2015), *European Policy-Making in Education and Training: Between Institutional Legitimization and Policy Privatization*. in: Souto-Otero, Manuel (ed.): Evaluating European Education Policy-Making. Privatization, Networks and the European Commission. Palgrave Macmillan. pp. 1-24

- Stéger, Csilla (2014), *Review and analysis on the teacher related policies and activities of the European Union*. European Journal of Education, Vol. 49. pp. 332-347.

- Stringher, Cristina (2014), *Issues in measurement of learning to learn competencies. For practical empowerment interventions*. A PowerPoint presentation (online: https://www.researchgate.net/publication/274333137_Issues_in_measurement_of_learning_to_learn_competencies)

- Thematic Working Group on Entrepreneurship Education (2014), *Final Report of the Thematic Working Group on Entrepreneurship Education*. Final Report.

- Villalba, Ernesto (ed.) (2009), *Measuring Creativity*. Proceedings for the conference, "Can creativity be measured?" Brussels, May 28-29, 2009. Luxembourg. Publications Office of the European Union

ANNEXES

Annex 1

The original 29 indicators proposed by the SGIB in 2003 (European Commission, 2003a)

Age distribution of teachers together with upper and lower retirement age.

Number of young people in the 0-15 and 16-19 age groups and as percentage of total population.

Ratio of pupils to teaching staff by education level.

Percentage of those aged 22 who have successfully completed at least upper secondary education (Isced 3).

Percentage of pupils with reading literacy proficiency "level 1" and lower on the PISA reading literacy scale.

Distribution and mean performance of students, per country, on the PISA reading literacy scale.

Distribution and mean performance of students, per country, on the PISA mathematical literacy scale.

Distribution and mean performance of students, per country, on the PISA science literacy scale.

Percentage of adults with less than upper secondary education who have participated in any form of education or training, in the last 4 weeks by age group (25-34, 35-54 and 55-64).

Students enrolled in mathematics, science and technology as a proportion of all students in tertiary education (ISCED 5A, 5B and 6).

Graduates in mathematics, science and technology (ISCED 5A, 5B and 6) as percentage of all graduates (ISCED 5A, 5B and 6).

Total number of tertiary (ISCED 5A, 5B and 6) graduates from mathematics, science and technology fields.

Share of tertiary graduates in mathematics, science and technology per 1000 inhabitants aged 20-29 - Broken down by ISCED levels 5A, 5B and 6.

Public expenditure on education as a percentage of GDP

Private expenditure on educational institutions as a percentage of GDP

Enterprise expenditure on continuing vocational training courses as a percentage of total labour costs.

Total expenditure on educational institutions per pupil/student by level of education (PPS)

Total expenditure on educational institutions per pupil/student by level of education relative to GDP per capita.

Percentage of population aged 25-64 participating in education and training in 4 weeks prior to the survey by level of educational attainment.

Hours in CVT courses per 1000 hours worked (only enterprises with CVT courses), by NACE.

Hours in CVT courses per 1000 hours worked (all enterprises), by NACE

Participation rates in education by age and by level of education.

Share of the population aged 18-24 with only lower secondary education and not in education or training

Distribution of lower/ upper secondary pupils, learning foreign languages.

Average number of foreign languages learned per pupil in upper secondary education.

Inward and outward mobility of teachers and trainers within the Socrates (Erasmus, Comenius, Lingua and Grundtvig) and Leonardo da Vinci programmes

Inward and outward mobility of Erasmus students and Leonardo da Vinci trainees

Foreign students enrolled in tertiary education (ISCED 5 and 6) as a percentage of all students enrolled in the country of destination, by nationality (European country or other countries)

Percentage of students (ISCED 5-6) of the country of origin enrolled abroad (in a European country or other countries)

New indicators to be developed

Language competencies

Efficiency in expenditure on education and training

Learning to learn skills

Percentage of teachers and trainers in continuous training

Social background of tertiary students

Social cohesion and active citizenship

Equity

ICT

Mobility

Annex 2

The 20 core indicators proposed by the Commission in 2007 (European Commission, 2007a)

Participation in pre-school education
Special needs education
Early school leavers
Literacy in reading, mathematics and science
Language skills
ICT skills
Civic skills
Learning to learn skills
Upper secondary completion rates of young people
School management
Schools as multi-purpose local learning centres
Professional development of teachers and trainers
Stratification of education and training systems
Higher education graduates
Cross-national mobility of students in higher education
Participation of adults in lifelong learning
Adults' skills
Educational attainment of the population
Investment in education and training
Returns to education and training

Annex 3

Table 2: The percentage of pupils achieving each CEFR level[73] in first and second foreign language, by skill in the European Survey on Language Competences (average across educational systems)

	First foreign language			Second foreign language		
	Reading	Listening	Writing	Reading	Listening	Writing
B2 - Advanced independent user An independent language user who can express herself clearly and effectively	27	30	13	15	14	5
B1 - Independent user An independent language user who can deal with straightforward, familiar matters	14	15	27	12	13	17
A2 - Advanced basic user A basic user who can use simple language to communicate on everyday topics	12	13	24	13	16	21
A1 - Basic user A basic user who can use very simple language, with support	33	25	25	41	37	36
Pre-A1 - Beginner A learner who has not achieved the level of competence described by A1	14	17	11	19	20	21

Source: European Commission (2012c)

---

[73]   Common European Framework of Reference for Languages.

Table 3: **The percentage of pupils achieving each CEFR level in first foreign language, by skill in the European Survey on Language Competences according to participating countries**

Educational system	Language	Reading			Listening			Writing		
		Pre-A1	A	B	Pre-A1	A	B	Pre-A1	A	B
Bulgaria	English	23	43	34	23	37	40	15	52	32
Croatia	English	16	44	40	12	32	56	5	49	45
Estonia	English	7	33	60	10	27	63	3	37	60
Flemish Community of Belgium	French	12	63	24	17	62	20	19	59	22
France	English	28	59	13	41	46	14	24	61	16
French Community of Belgium	English	10	59	31	18	55	27	6	65	29
German Community of Belgium	French	10	52	38	11	49	40	8	51	41
Greece	English	15	40	45	19	35	46	7	41	53
Malta	English	4	17	79	3	11	86	0	17	83
Netherlands	English	4	36	60	3	21	77	0	39	60
Poland	English	27	49	24	27	45	28	19	59	23
Portugal	English	20	53	26	23	39	38	18	55	27
Slovenia	English	12	42	47	5	28	67	1	51	48
Spain	English	18	53	29	32	44	24	15	58	27
Sweden	English	1	18	81	1	9	91	0	24	75
UK England	French	22	68	10	30	62	8	36	54	10

Source: European Commission (2012c)

DIRECTORATE-GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT B
STRUCTURAL AND COHESION POLICIES

Role

The Policy Departments are research units that provide specialised advice
to committees, inter-parliamentary delegations and other parliamentary bodies.

Policy Areas

- Agriculture and Rural Development
- Culture and Education
- Fisheries
- Regional Development
- Transport and Tourism

Documents

Visit the European Parliament website:
http://www.europarl.europa.eu/supporting-analyses

PHOTO CREDIT: iStock International Inc., Photodisk, Phovoir

Publications Office