

EDUCATION INDICATORS IN THE EUROPE OF THE REGIONS

LES INDICATEURS D'EDUCATION DANS L'EUROPE DES REGIONS

PROCEEDINGS ACTES

**CONSELL SUPERIOR D'AVALUACIÓ DEL SISTEMA EDUCATIU
DEPARTAMENT D'ENSENYAMENT**

Barcelona, juliol de 1995



**Generalitat de Catalunya
Departament d'Ensenyament**

CONTENTS

	Pàgina
Foreword	5
Programme	7
Opening speeches	17
Opening speech of the President of the Consell Superior d'Avaluació Mr <i>Octavi Fullat</i>	19
Opening speech of the Dean of the Col·legi de Doctors i Llicenciatxs Ms <i>Josefina Cambra</i>	21
Opening speech of the Secretary General of the Departament of Education Mr <i>Antoni Gelonch</i>	23
Conferences	27
International developments in the area of Regional Education indicators <i>Bettina Knauth</i>	29
The current state of Educational Evaluation studies in Catalonia <i>Joan Mateo</i>	33
The task of the "Consell Superior del Sistema Educatiu" <i>Mireia Montané</i>	39
Coordinating Educational Indicators on the Regional, State, European and International levels <i>Eugene Owen</i>	45
Le Pilotage des Systèmes d'Enseignement <i>Gilbert de Landsheere</i>	55

Working group sessions. Summaries	67
Session I. Anne West	69
Session II. Carme Vidal	73
Session III. Alain Michel	75
Discours de synthese.	
Pierre Mondon	79
Closing ceremony speeches	85
Speech of Octavi Fullat	87
Speech of Joan Maria Pujals	89
List of participants	93
Bibliography	99

FOREWORD

The Seminar, the Proceedings of which we are presenting here, was the outcome of the interest of the Department of Education in establishing a system of indicators for Catalonia, comparable on a European, international and interregional level, and of the interest of the European Commission in supporting regional initiatives like this one.

The Seminar was proposed as a sounding board for the concerns, demands and plans regarding the evaluation of educational systems on a non-national level.

One of the final resolutions of the Seminar proposed the creation of a European organisation of regional bodies with administrative responsibilities in the field of education, which would foster the collaboration of administrators and experts in evaluation and statistics of different European regions whose aim, among others, would be to achieve the coherence necessary for elaborating Education Indicators at a regional level.

A direct consequence of the seminar, then, has been holding a meeting of experts, at the seat of the *Consell Superior d'Avaluació*, to foster interregional cooperation in an organised and continuous way.

The common points of the two meetings was Education and Europe. It is therefore no

coincidence that our aims coincide with those defined, in the field of education and training, by the **White Paper** of the European Commission on growth, competitiveness and employment, in which they say that the first objective should be to **further develop the European dimension in education**: to raise the quality of training and promote educational innovation by means of generalising exchanges of experience and information...and carrying out joint projects..., creating data bases and common bases of knowledge on needs in terms of qualifications, to carry out comparative research on methodologies and the adopted policies.

In other words, inundate the lands and the peoples of Europe with the idea of Europe as a common citizenship project. The task of the educational professionals is, in this respect, as or more vital than that of building the great political-administrative superstructures.

If we educators draw closer together, we will lead Europe towards its future.

This is why the Seminar "Education Indicators in the Europe of the Regions" brought us together. And this is why we would like to open ourselves up now to all the geographies and to a new era.

OCTAVI FULLAT I GENÍS
President of the *Consell Superior d'Avaluació
del Sistema Educatiu*"

PROGRAMME

**EDUCATION INDICATORS IN THE
EUROPE OF THE REGIONS**

**LES INDICATEURS D'EDUCATION DANS
L'EUROPE DES REGIONS**

A European Seminar under the auspices of/
Séminaire européen organisé sous les auspices du

Consell Superior d'Avaluació del Sistema Educatiu de la
Generalitat de Catalunya

Collegi de Doctors i Llicenciat en Filosofia i Lletres i
en Ciències de Catalunya

Task Force Human Resources, Education, Training and Youth
of the European Union/
*Task Force Ressources Humaines, Education, Formation
et Jeunesse de l'Union Européenne*

28-30 November, 1994
Barcelona

HONORARY COMMITTEE/COMITÉ HONORAIRE

President/*Président*

Jordi Pujol,
President / Président. Generalitat de Catalunya

Members of Honorary Committee/*Membres du Comité Honoraire*

Joan Maria Pujals,
Minister of Education / Ministre de l'Education. Generalitat de Catalunya

Antoni Gelonch,
General Secretary of Education. Generalitat de Catalunya / Secrétaire Général du Ministère de l'Education. Generalitat de Catalunya

Octavi Fullat,
President of Consell Superior d'Avaluació del Sistema Educatiu of the Generalitat de Catalunya / Président du Conseil Supérieur d'Avaluació du Système Educatif de la Generalitat de Catalogne

Josefina Cambra,
Dean of Col·legi de Doctors i Llicenciats de Catalunya / Doyenne du Collège de Doctors i Llicenciats de Catalogne

ACADEMIC COMMITTEE/COMITÉ SCIENTIFIQUE

Chairpersons/*Présidents*

- Pierre Mondon,
Task Force Human Resources, Education, Training and Youth of the European Union / Task Force Ressources humaines, Education et Jeunesse de l'Union Européenne
- Mireia Montané,
Secretary / Secrétaire du Consell Superior d'Avaluació del Sistema Educatiu de la Generalitat de Catalunya

Members of Academic Committee/*Membres du Comité Scientifique*

- Rafael Bisquerra, Universitat de Barcelona. Catalunya
- Josep Gallifa, Universitat Ramon LLull. Catalunya
- Dolors Iduarte, Consell Superior d'Avaluació. Catalunya
- Gilbert de Landsheere, Service de Pédagogie Expérimentale. Université de Liège. Belgique.
- Kimmo Leimu, University of Jyväskylä. Finland
- Joan Mateo, ICE Universitat de Barcelona. Catalunya
- Alain Michel. Inspection Général. Ministère de l'Education National. France
- Josep Montané, Universitat Autònoma de Barcelona. Catalunya
- Cassià Pérez, Consell Superior d'Avaluació. Catalunya
- Lucio Pusci, Centro Europeo dell'Educazione. Ministero della Pubblica Istruzione. Italia
- Eugene Owen, National Center for Educational Statistics. Washington D.C. United States

ORGANISING COMMITTEE/COMITÉ ORGANISATEUR

- Sofia Lázaro, Consell Superior d'Avaluació. Catalunya
- Carme Segura, Consell Superior d'Avaluació. Catalunya
- Isabel Travasset, Col·legi de Doctors i Llicenciats de Catalunya

PROGRAMME

Saturday, 26 November

- All day- Arrival of participants.
MAJESTIC Hotel. Passeig de Gràcia, 70
Barcelona

Sunday, 27 November

9.00 - 17.30

- Cultural visit of Barcelona

18.30 - 20.00

- Meeting of Academic Committee
with speakers and working group
presidents and secretaries

Chairs: Pierre Mondon and
Mireia Montané

Monday, 28 November

9.00 - 9.30

- Receiving of participants at seminar

9.30 - 10.30

- Opening of conference by M. Antoni
Gelonch General Secretary of the
Departament Education of Generalitat de
Catalunya, M. Octavi Fullat, President of
Evaluation Council and Ms. Josefina
Cambra, Dean of Col·legi de Doctors i
Llicenciatos de Catalunya

10.30 - 11.00 - Coffee break

Conferences:

11.00 - 12.15

- *"The Role of the Regions in Establishing Education Indicators"* - **Pierre Mondon**, Task Force Human Resources, Education, Training and Youth of the European Union

Chair: Antoni Gelonch

12.15 - 12.30 - Coffee break

12.30 - 13.00 -

- *"The Current Situation of Education Indicators"* - **Bettina Knauth**,
EUROSTAT

13.00 - 13.30

- Presentation of working groups by
group presidents

13.30 - 15.30 - Lunch in hotel

Conferences:

15.30 - 16.30

- *"The Current Situation of Educational Evaluation Studies in Catalonia"* - **Joan Mateo**, Director of Institut de Ciències de l'Educació. Universitat de Barcelona.

16.30 - 17.30

- *"The Task of the Consell Superior d'Avaluació del Sistema Educatiu"* - **Mireia Montané**, Secretary of the Consell Superior d'Avaluació del Sistema Educatiu

Chair: Gilbert de Landsheere

17.30 - 18.00 - Coffee break

18.00 - 19.30

- Working groups

Tuesday, 29 November

9.00 - 10.30

Conference:

"*Coordinating Educational Indicators on the Regional, State, European and International Levels*" - **Eugene Owen**, National Center for Educational Statistics. Washington D.C. United States

Chair: Lucio Pusci

10.30 - 11.00 - Coffee break

11.00 - 13.30

Working groups

13.30 - 15.30 - Lunch in hotel

15.30 - 17.00

- Conference:

"*Perspectives on the Use of Indicators in the Evaluation of Educational Systems*" - **Gilbert de Lansheere**, Faculty of Psychology and Educational Sciences, University of Liège

Chair: Octavi Fullat

17.00 - 17.30 - Coffee break

17.30 - 19.00

- Working groups

19.00 - 20.30

- Meeting for working group presidents and secretaries to draw up report on conclusions and proposals

20.30

- Group dinner at "Real Club Marítim de Barcelona" restaurant (5,000 pta, \$40 or 32 ECU per person)

Wednesday, 30 November

9.00 - 10.00

- Closing speech - **Pierre Mondon**

10.00 - 10.30 - Coffee break

10.30 - 11.30

- Leave for the Palau de la Generalitat

11.30 - 13.00

- Closing ceremony by the Minister of Education of Generalitat de Catalunya, M. **Joan Maria Pujals**

Presentations of Seminar conclusions and proposals by President of Consell Superior d'Avaluació, M. **Octavi Fullat**

A champagne toast

PROGRAMME

Samedi, 26 novembre

- Toute la journée - Arrivée des participants.
Hôtel MAJESTIC, Passeig de Gràcia, 70,
Barcelona

Dimanche, 27 novembre

9.00 - 17.30

- Visite culturelle de Barcelona

18.30 - 20.00

- Réunion du comité académique avec les orateurs, les présidents et les secrétaires des groupes de travail

Présidents: Pierre Mondon et
Mireia Montané

Lundi, 28 novembre

9.00 - 9.30

- Accueil des participants au Séminaire

9.30 - 10.30

- Inauguration de la Conférence par M. Antoni Gelonch, Secrétaire Général du Ministère de l'Education de la Generalitat de Catalogne, M. Octavi Fullat, Président du Consell Superior d'Avaluació et par Mme. Josefina Cambra, doyenne du Col·legi de Doctors i Llicenciats de Catalunya

10.30 - 11.00 - Pause café

- Conférences:

11.00 - 12.15

- "*Le rôle des régions dans l'établissement des Indicateurs d'Education*" - **Pierre Mondon**, de la Task Force Ressources Humaines, Education, Formation et Jeunesse de l'Union Européenne

Président: Antoni Gelonch

12.15 - 12.30 - Pause café

12.30 - 13.00

- "*Etat des lieux des Indicateurs de l'Education*" - **Bettina KNAUTH**, EUROSTAT

13.00 - 13.30

- Présentation des groupes de travail par les présidents des groupes

13.30 - 15.30 - Déjeuner à l'hôtel

- Conférences:

15.30 - 16.30

- "*Situation actuelle des études d'évaluation de l'enseignement en Catalogne*" - **Joan Mateo**, Directeur de l'Institut de Ciències de l'Educació. Universitat de Barcelona

16.30 - 17.30

- "*Le rôle du Consell Superior d'Avaluació del Sistema Educatiu*" - **Mireia Montané**, Secrétaire du Consell Superior d'Avaluació del Sistema Educatiu

Président: Gilbert de Landsheere

17.30 - 18.00 - Pause café

18.00 - 19.30

- Groupes de travail

Mardi, 29 novembre

9.00 - 10.30

- Conférence:

"*Coordination des Indicateurs d'Education aux niveaux régional, national, européen et international*" - **Eugene Owen**, Responsable d'Affaires Etrangères du National Center for Educational Statistics. Washington.

Etats-Unis

Président: Lucio Pusci

10.30 - 11.00 - Pause café

11.00 - 13.30

- Groupes de travail

13.30 - 15.30 - Déjeuner à l'hôtel

15.30 - 17.00

- Conférence:

"*Perspectives en matière d'utilisation des Indicateurs pour l'évaluation des systèmes éducatifs*"

- **Gilbert de Landsheere**.
Laboratoire de Pédagogie Expérimentale.
Université de Liège

Président: Octavi Fullat

17.00 - 17.30 - Pause café

17.30 - 19.00

- Groupes de travail

19.00 - 20.30

- Réunion des présidents et des secrétaires des groupes de travail pour rédiger le compte-rendu des conclusions et les propositions

20.30

- Dîner au restaurant "Real Club Marítim de Barcelona"
(5000 Pta/40 \$/32 ECU/ personne)

Mercredi, 30 novembre

9.00 - 10.00

- Discours de synthèse - **Pierre Mondon**

10.00 - 10.30 - Pause café

10.30 - 11.30

- Départ pour le Palau de la Generalitat

11.30 - 13.00

- Cérémonie de clôture par le Ministre de l'Education de la Generalitat de Catalunya
M. Joan Maria Pujals

Présentation des conclusions du Séminaire et des propositions par le Président del Consell Superior d'Avaluació, **M. Octavi Fullat**

Vin d'honneur

**Consell Superior d'Avaluació del Sistema Educatiu. Generalitat de Catalunya.
Departament d'Ensenyament**

**Comte d'Urgell , 240, 7è.,A
08036 Barcelona
Phone: (34) (3) 419 90 51**

Collegi Oficial de Doctors i Llicenciatxs en Filosofia i Lletres i Ciències de Catalunya

**Rambla de Catalunya, 8 pral.
08007 Barcelona
Phone: (34) (3) 317 04 28**

Task Force for Human Resources, Education, Training and Youth of the European Union

**Rue de la Loi, 200
B-1049 Brussels. Belgium
Phone: (32) (2) 299 11 11**

Palau de la Generalitat

**Plaça de Sant Jaume,4
08002 Barcelona
Phone: (34) (3) 402 46 00**

Hotel Majestic

**Passeig de Gràcia, 70
08005 Barcelona
Phone: (34) (3) 488 17 17**

Restaurant "Real Club Marítim de Barcelona"

**Moll d'Espanya s/n
08003 Barcelona
Phone: (34) (3) 221 62 56**

OPENING SPEECHES

**OPENING SPEECH OF THE
PRESIDENT OF THE CONSELL SUPERIOR D'avaluació
MR OCTAVI FULLAT**

General Secretary, Representative for the European Comission, Dean of the Col·legi de Llicenciats, Ladies and Gentlemen:

All of us participating in this Seminar are interested in resolving the issues presented by problems in education. Our interest and curiosity has led us to formulate a series of questions, the answers to which are the challenge we are facing in this Seminar. The answers to these questions do not require contemplation, but rather demand active participation, a combative attitude. This is the only way we can convince educational administrations of how important it is to have data that will provide solutions to problems in education systems. In our case, Secretary General, we know that you are fully convinced of the need to promote these indicators, which is why you supported the creation of the *Consell Superior d'Avaluació del Sistema Educatiu*.

The very title of this Seminar, although quite short, is highly complex, and poses not one but many questions. Maybe we are talking about what influence international, European and state Indicators have on regional education systems. Or maybe we are trying to determine what contribution regional educational administrations can make to consolidating a general system - in this case European - of Education Indicators.

The "Europe of Regions" mentioned in the title implies the optimistic assumption that a number of questions will be answered. Questions such as: What is a region? What factors define a region? Does the concept of "region-nation" have any meaning? What are the nature, origin and dynamics of socio-political state structures - whether multinational or otherwise - and supranational structures? What are the ranges and limits of

the various social areas forming each individual - or rather, what are each individual's limitations in relation to those areas where they feel either at home or alienated? And how is it possible to open oneself up to something new if one does not already have a well-defined identity?

Maybe another word in the name of the seminar, "education", will be easier for us, given that everyone here is involved in this field. Is education, as Durkheim asserts, the set of activities which a human group uses to ensure that all its members acquire the social experience accumulated throughout history and organised into a culture? How does one decide how many experiences can be considered valid? How many cultures? And, therefore, how many educations? Is cultural diversity something good, or does it hinder the formation of a hypothetical global society? How does one include the culture of a particular social group - knowledge of the environment, history and language - in a wider social context? Can education become "unnaturalised" through cultural alienation?

These may be enough questions. We can, of course, go more deeply into all of them or make wider questions, with the resulting strings of complex, subtly different and ever conflicting answers.

Now, we must not get frightened. We cannot run away from either the forest of questions or the battle of answers. They are the natural environment of knowledge, our familiar landscape and environment - so familiar that we can sometimes use the landrover of simplification to cross the rough ground as if it were the open plain.

Incidentally, we should be more concerned about the data and interrelated information that nobody understands - the information that has not yet been structured into coherent answers because they lack the stimulus of a question to illuminate their significance.

Our intellectual task is to track down answers and sniff out questions.

There are fundamental, direct questions, such as: "What?". What, for example, is an Indicator? The simple formulation of the question reveals a particular area of ignorance. The gap in my knowledge is perfectly clear.

This is not the case when we are dealing with more complex questions, with a more diffuse and confused point of reference, such as: "why?". Why, for example, do students fail?

In this case, "Why?" is not strictly speaking ONE question, but the abstract meaning behind any number of direct questions. Every system has an added value over and above the sum of its elements. We build question structures and thus obtain new potentials for investigation.

Just as science is based on analysis, criticism, selection and the interrelationship between answers, so is research centred around questions.

A system of Education Indicators is merely the application of this method, which I have so briefly explained, in the field of education.

In other words, it is a system of questions which have answers, designed to achieve further answers to questions which have not yet been raised. Maybe these questions will arise now, providing the system with an added value.

This is essentially the challenge presented by our Seminar, and the challenge that we have accepted: look for answers, yes, but also find new questions to maintain the necessary intellectual tension.

We wish everybody luck and success.

Thank you very much.

**OPENING SPEECH OF THE
DEAN OF THE COL.LEGI DE DOCTORS I LLICENCIATS
MS. JOSEFINA CAMBRA**

**Mr. General Secretary, Mr. Representative
of the European Commission, Mr. President
of the Higher Council for Evaluation,
Ladies and Gentlemen:**

The "White Paper" of the European Commission lays out a whole panorama of challenges and possible strategies for dealing with the demands of the society undergoing accelerated change in the 20th century. According to this document, education is fundamental for constructing a new model of community development, but the European systems of education and training will not be able to guarantee this function if they are not readapted. Therefore, the place that education and training have in the functioning of society and their relation with economic and social activity will have to be reconsidered.

Now, take note: the main challenge for the future for the educational profession is knowing how to adapt to socio-economic and technological changes, especially when the context is a plurinational society requiring a model of integration which respects different languages and cultures.

Now, if the labour conditions of teachers are not respectable and do not give them incentive at every level - intellectual, social, economic, etc. - any strategy for change will fall into the realm of good intentions and good will, that is, will be left to chance.

The prime purpose of the institution I represent is precisely this: "To improve the social and economic status of members and insure a well-rounded and continuing training."

The Col·legi de Doctors i Llicenciat en Lletres i en Ciències de Catalunya was set up in 1899. Throughout its history it has accumulated substantial experience in in-

service training, substituting an Administration which for years has been absent from the overall interests of the country. One of the most successful things it has done in the area of teacher training has been its organising of the annual "Summer Schools", since 1973, for educators at the Baccalaureate level.

With the reinstatement of the Generalitat [the regional autonomous government of Catalonia], the Catalan educational administration assumed responsibility for organising teacher training under what is called the Continuing Education Plan. The Col·legi, today already over 15,000 members strong, is an organisation working in collaboration with the educational administration of our country, and it has a long tradition of improving teachers' skills and knowledge.

Obviously, as an institution rooted in Catalonia, the Col·legi aims to promote teachers' education within the lines of the country and the culture which form us: the environment, the geography and history, the art and literature and, of course, the language. For example, courses that are scheduled fairly regularly include "Catalan Historiography and the Teaching of National History", "Lessons in Catalan Art", "The Catalan Literary Press", "Commentary on Contemporary Catalan Poetry", "Catalan Language: Text and Context", etc. In this way we respond to some basic demands of defining identity, which is quite far from any type of mental restrictions.

I have referred to the challenge of the plurinational society in the 21st century. Well

before the "White Paper" appeared, with its urgent appeal to develop a European

dimension in education, back in 1982 our institution was already responding to this need by participating in European programmes, thus putting itself at the head of this movement in Catalonia.

Training courses of the past few years clearly show this trend, such as "Science across Europe", "The European Dimension in Education", and "Secondary Education in Europe: Some Innovations in School Management". The Col·legi belongs to the Réseau d'Institutions de Formation (RIF), specifically Subnetwork 6, "Making a Basic Curriculum on the European Dimension for Secondary Education". And perhaps our participation in the organisation of this seminar which has brought you together here is enough of an explanation of our involvement in these matters. Well - in terms of this being a "European" seminar, but what about in terms of it being a seminar on "indicators"?

An indicator system is a diagnostic method. The current system of education indicators does not collect data on teachers when it makes its diagnosis. We know, however, that network D of the INES project has already presented the conclusions of its work and that the forthcoming publication of Education Indicators of the OECD will collect the systemisation of the - if you permit me - symptomatology in terms of the training, qualifications, status and worth of teachers.

Education indicators reflect a situation; they do not change it. After previous analysis, this task is undertaken, among others, from the information that indicators give to educators and educational administrators.

Once the diagnosis is known, it is in our hands, if we are lucky, to apply the treatment. The administrations may have to change their strategies, always keeping in mind, of course, their logistical resources, among which the human resources are the most important.

During the Seminar we will also be talking about the incidence of the regional educational authorities in defining the system of educational indicators of the European Union and in making their own indicators for their area. Catalonia is working on this, but we do not yet have our own education indicators. What we do have is indications, that is, indicators which are not yet systematised nor statistically quantified. Indications, for example, that our Catalan students run the risk of a loss of identity in their knowledge of national history. Perhaps we cannot expect that future internal indicators in Catalonia will strengthen this identity, but we may be able to start remedying the situation now by favourably affecting the future diagnosis.

This is the daily and the long term task of the institutions dedicated to professional training and development. Even if we are not directly involved in the technique of obtaining a photographic image of a specific instant, we can affect the landscape.

That is what we are after and that is what we are here for.

Thank you very much.

**OPENING SPEECH OF THE
SECRETARY GENERAL OF THE DEPARTMENT OF EDUCATION
MR. ANTONI GELONCH**

Mr. Representative of the European Commission, Mr. President of the Higher Council for Evaluation, Ms Dean of the Col·legi de Llicenciats,

Ladies and Gentlemen:

I would like to give you a very warm welcome to the seminar on "Education Indicators in the Europe of the Regions", and to wish you a beneficial and pleasant stay with us.

It is an honour to have the opportunity to bring together in Catalonia a group of some ninety educational researchers, administrators and managers, among whom we have people working in the evaluation of educational systems - whether in educational administrations or in universities - as well as those who face the day-to-day challenge of managing primary or secondary schools, of preparing the children of Catalonia, of Spain, of Europe and of the world to be good citizens.

This seminar aimed, in fact, to bring together school directors, inspectors, university professors, educational administrators, all those interested in the evaluation of the educational system in the regions and countries making up the European Union, along with representatives of international evaluation associations such as the OECD, UNESCO, the International Association for the Evaluation of Educational Achievement (IEA), and the International Association for Educational Assessment (IAEA), and experts from the United States and Mexico, who were invited here specially.

I would like to introduce all of you to my country.

The Spanish Constitution of 1978 recognises and guarantees the right to autonomy of the different nationalities and regions within Spain. By these rights, Catalonia is an autonomous region within the Spanish state. It is almost 32,000 square kilometers and numbers some 6 million inhabitants. It is a densely populated country, and a large part of its population is concentrated in the Barcelona area. Catalonia represents 6% of the territory of Spain and 6% of its population. It has a history, a language and a culture that are over a thousand years old.

Catalonia has long been concerned with educational research. Educational reform reached the public schools in the second decade of the century. Barcelona was the first place in Spain to apply the Montessori method, around the same time that the Council for Pedagogical Research, directed by notable educators like Alexandre Galí, was founded.

With this Council for Pedagogical Research came the Summer Schools, where courses for teachers were given by prestigious educators, such as the Swiss Edouard Cléparède, founder of the Institut Rousseau in Geneva, (now the Institute of Educational Studies), and soon after this, the chair of Pedagogy

was given to Doctor Montessori.

With the current reinstating of democracy, Catalonia has, after a four-decade long pause, been able to get back authority over education. This authority is divided between the national government and the autonomous regional governments. The Statute of Autonomy gives Catalonia full authority over education in areas such as managing the educational system throughout its territory and defining and developing curricula, and managing schools, teaching staff, inspection, administration and budgets. The national government reserves the right to administer academic degrees and to determine the structure of the educational system and the minimum requirements for the curriculum in each subject.

The transfer of responsibility from the national government to the Catalan administration has been going on for 13 years under the Department of Education. Over 20,000 public school teachers and 65 thousand million pesetas have been transferred so far. I think it is important to point out that this is the first time in centuries that Catalan institutions have been able to manage all areas of their own educational system.

Historically speaking, the budget set aside for education has been the second greatest in economic resources (after health) and the first in terms of human resources.

The distinct characteristics of our educational system, which is the fruit of an active private Catalan initiative in the field of education on the one hand and the national government abandoning investments during long periods of time on the other, have shaped an educational system which is notably different from the rest of the country, with a particularly important private sector.

Allow me briefly to go through the last 13 years in the area of educational management, so you will understand how we have got to where we are now.

In 1982, current expenditure was about 60 billion pesetas and capital expenditure was about 8 billion. In 1994, however, the

current expenditure was over 257 billion (93% of the total), while capital expenditure was roughly 17 billion, not including university spending. In this period, then, spending has more than quadrupled, and in real terms, not counting inflation, has been practically double. The budget earmarked for education represents around 20% of the total budget of the Generalitat.

We can appreciate how much has been done for public schooling only by comparing the figures on school construction in Catalonia. In 1976, there were 75 public secondary schools in Catalonia. Ten years later, in 1986, there were 187. By 1990 the number had risen to 243, and today, besides these 243, there are 71 schools where the already-reformed secondary studies are offered (called ESO) and 37 where the new baccalaureate is offered, making a total of 351 public secondary schools guaranteeing compulsory schooling.

But the Department of Education wants to know all the factors that could improve the educational situation. This was the goal that led to the creation, in 1991, of the Advisory Council for the Evaluation of the Implementation of the Educational Reform, the nucleus of what two years later would be the Higher Council for the Evaluation of the Educational System.

One of the tasks the Council has tackled from the beginning is that of directing the project of Education Indicators in Catalonia. Right now a commission is working on indicators for the Catalan educational system that can be compared with those of the INES project of the OECD. To tell you about the results we have obtained so far would take me too much time. Let me just tell you about one (the P 12) that filled me with satisfaction because of what it bodes for the future: the rate of schooling for 4 and 5 year old children in Catalonia has already reached 100%.

At the same time, we are working to incorporate into the system of indicators those that are specific to Catalonia, comparable with those of the Autonomous Communities of Spain and with the other European Regions.

This is why the Department of Education

fully supports the organisation of this seminar, the first to be held on the evaluation of educational systems at the level of the European regions. We also hope that this seminar might give impetus to the collection of statistical data in the field of education in Catalonia and in other regions in Spain and in the European Union. And all of this ties in with the Resolution on promoting educational statistics in the European Union, which we hope will be approved this coming 5th of December by the Council of Ministers, which would solve many of the problems we now have in terms of collecting data.

I want to congratulate the Higher Council of Evaluation for its successful initiative in organising this seminar, and the Col·legi de

Doctors i Llicenciacs for its effective cooperation.

Finally, in the name of the Department of Education, I thank the Task Force - Human Resources, Education, Training and Youth of the European Commission for its support, and especially its representative, Monsieur Pierre Mondron, for his active, effective and enthusiastic cooperation on the technical and academic levels.

I hereby declare the seminar "Education Indicators in the Europe of the Regions" open.

Thank you very much.

CONFERENCES

INTERNATIONAL DEVELOPMENTS IN THE AREA OF REGIONAL EDUCATION INDICATORS

Bettina Knauth
Statistical Office of the European Communities

Bettina Knauth was born in 1959.

She studied sociology and statistics at the University of Munich (Germany), the University of Durham (UK) and the London School of Economics (UK).

She then worked as assistant researcher at the University of Hildesheim (Germany).

She joined Eurostat (Luxembourg) in 1989.

Since 1994, Ms. Knauth has been responsible for education and training statistics at Eurostat.

The Present Situation

In recent years, there have been numerous developments at an international level, both in the area of education indicators and that of regional indicators. Unfortunately, the area of regional education indicators has been left almost untouched, and interest at an international level has only awakened very recently.

Education Indicators

A major step in the development of education indicators was undertaken recently by the INES (Indicators of Education Systems) project of the OECD, which has produced a widely acclaimed annual publication, "Education at a Glance". The first edition was published in 1992, with the most recent third edition scheduled for spring, 1995. The indicators presented follow the theoretical framework of context (demographic, social and economic), cost and process (including information on human resources and expenditure, participation and decision-making processes in education), and results (in the form of student, system and labour market outcomes).

Eurostat, the statistical office of the European Communities, supplemented these

general education indicators with another set that more closely reflects the stated policy aims and current needs of the European Commission. These indicators belong to five key areas of interest to the Commission: viz., features of the education systems, the quality of the education and training system, the European dimension of education (including foreign language learning), vocational education and training and the labour market interface, and last but not least, equality of opportunity and access to education.

Regional Indicators

In line with the regional policy of the European Union, Eurostat has also invested considerable resources in the development of regional indicators. The areas covered include not only social fields such as demography, economic activity and living conditions (including education), but also other areas including economic aggregates, agriculture, energy or transport. The respective statistics and indicators are published regularly as a statistical yearbook ("Regions"), as well as in the form of a public-access database (REGIO).

For comparability purposes, Eurostat, in cooperation with the Commission's other departments, has developed its own

nomenclature of regions (NUTS = Nomenclature of Territorial Units for

Statistics) with a view to providing a single, uniform breakdown of territorial units for the production of regional statistics for the European Union. It has the following features:

- The NUTS favours institutional breakdowns: For practical reasons to do with data availability and the implementation of regional policies, the NUTS nomenclature is based primarily on institutional divisions currently in force in the Member States (normative regions).

- The NUTS favours regional units of a general character: it excludes specific territorial units and local units to the benefit of regional units of a general nature that are applicable to all areas of interest (education, labour market, etc.).

- The NUTS is a three-level hierarchical classification. The administrative structures of the Member States generally comprise two main regional levels and one local level. The grouping together of comparable economies in terms of economic size involves establishing, for each Member State, a regional level in addition to the two main levels. The former therefore corresponds to a less important, or even non-existent, administrative structure, and its classification level varies depending on the Member State.

For example, the Spanish NUTS 1 consists of 7 *agrupaciones de comunidades autónomas*; NUTS 2 consists of 18 *comunidades autónomas* plus Melilla and Ceuta, and NUTS 3 comprises 52 *Provincias*.

From a more analytical perspective, a classification of the degree of urbanisation has been developed more recently, which distinguishes between three degrees of urbanisation: densely populated areas, intermediate areas and thinly populated areas.

Regional Education Indicators

Despite considerable advancements, in the areas both of education and regional

indicators, the development of regional education indicators on an international level is still in its infancy. Over the last two years, Eurostat has published a limited number of regional education indicators as part of the so-called Rapid Reports on education. Most of these indicators related to higher education, such as the share of higher education in the overall enrolment figures, the share of women in higher education enrolment, and the proportion of EU nationals among the non-national students in higher education. Another indicator - the participation rate of 16-18 year olds - has recently been added. Although efforts were made to have these indicators available for regions on level NUTS 2, data was only available in a number of cases for regions of level NUTS 1.

The underdevelopment of regional education indicators in international statistics can be attributed mainly to the paucity of data available, as well as conceptual difficulties, rather than lack of interest in the subject.

Some problems in the availability of administrative data for the territorial breakdowns corresponding to the NUTS classification still have to be resolved for some of the EU Member States. This is the price which we have to pay for the advantage of using regional units of a general character, which, in principle, facilitate the calculation of indicators, as the respective demographic or economic data are readily available. Regarding survey data, regional representativeness has only recently become a main concern. For the 1992 data collection onwards, sampling for the Community Labour Force Survey has been adapted in such a way so as to improve representativeness of the results at a regional level.

One of the most important conceptual problems derives from the generally high geographical mobility between regions within the same country. Thus, for instance, a substantial share of higher education in the overall enrolment figure of a region might be due to a concentration of higher education institutions in this region. As a result, the respective indicator has to be interpreted with great care, since depicting the situation of the education system in this particular

region does not provide information about the aspirations of its population. The same is true with the indicator on the educational attainment level of the population. The result will show the degree of geographical mobility, which, in turn, depends largely on labour market possibilities, rather than depicting the educational abilities of the local population.

Recent Developments

The importance of regional education statistics, however, remains indisputable, and is even growing in significance. This is due to the increased political importance of regions within the European Union, for which the establishment of a Committee of the Regions is a clear sign. Within the Eurostat system, a number of education indicators have been planned as regional indicators.

These indicators have been designed to answer specific political questions concerning regional development, regional investment needs and the quality of education in the regions.

In addition, the OECD has recently started considering regional education indicators with a special focus on resource indicators such as expenditure per pupil or pupil-teacher ratios.

The joint OECD/Unesco/ Eurostat data collection of administrative education statistics (UOC questionnaires) is being revised at the moment and will include, for the first time, information on regional level. The data collected in the initial phase will concentrate on enrolment by level of education, type of institution, sex and age, enrolment of non-national students in tertiary education by citizenship, resident status and sex, and the study of modern foreign languages.

Thank you very much

**THE CURRENT STATE OF
EDUCATIONAL EVALUATION STUDIES
IN CATALONIA**

Joan Mateo

**Director of Institut de Ciències de l'Educació,
University of Barcelona**

I would like to thank the *Consell Superior d'Avaluació* and the *Collegi de Doctors i Llicenciatxs* for this invitation to reflect with you on the latest research here in Catalonia. I will try to keep from giving merely a descriptive analysis of what the main line or lines of research in evaluation have been. I will use a summary of data to try to show what our orientation in evaluation is at the moment in our small country of Catalonia.

After analysing the sources, I will look at a study carried out by a team of teachers coordinated by Dr. Serramona at the *Universitat Autònoma* in which an overview was made on secondary education in Catalonia, and then bring you up to date on the latest acquisitions in the data base - specifically Redinet -, in university dissertations and other reports from organisations involved in research, and first-hand information from the body of educational inspectors in Catalonia. With all this material, we will be able to start to see the direction our research has been going in recently, especially in the field of evaluation.

In Catalonia there are at least a thousand research studies in education that have been done over the last few years, and I mean finished studies which have been published or at least registered so that the regular official data bases have access to them.

According to my analysis, multicultural education, bilingualism, and educational psychology are topics that have been growing in importance in educational studies. But the two areas which may be growing the most and for which there are the most publications are teacher training and evaluation. 12% of

the studies could be said to belong directly to the area of evaluation. At the moment I don't believe that this 12% has any special importance. A closer analysis still has to be made of all the research, with some areas that have been diminishing or abandoned being looked at closely.

We have seen recently a growing interest in evaluation. Obviously evaluation has always been an important area in the field of educational thought. But for it to have its own research, separate from the rest of education, has not been usual until the last few years.

Of the evaluation studies 45% of those I had the opportunity to see fit into the area of evaluation of educational processes. Approximately 25% are based on the evaluation of curricula, 24% on the evaluation of schools, 4% on the evaluation of teachers, and 1% are dedicated to an evaluation of the educational system. The remaining 1% are hard to classify.

As for the methodology used in these studies, 90% of the research currently carried out uses what we may call a positivist paradigm, 99% of which are studies of the expressed type; that is, studies dealing with current phenomena occurring in the field. Only 10% of the research examined could be considered to use a humanistic paradigm, and of the humanistic studies, most would fall into the category of interpretation.

Basically the ex-post-facto type of studies are of the descriptive and correlational type, which are the techniques that are used most in the whole range of research.

Only 1% of the work could be considered

experimental, and even within this 1% the vast majority are studies of a pre-experimental or quasi-experimental type.

Apart from this, there is a sort of radiology - by no means the backbone of research - which tries to read between the lines in order to determine from an evaluative perspective what the educational discourse we are constructing in Catalonia may be.

Throughout the international community, from the turn of the century until 1960, all evaluative research was dominated, as it still is in our case, by the evaluation of learning. Not until the 1970's did we begin to work in a serious and systematic manner the evaluation of curricula. And at the end of the 1970's came into force the whole methodological revolution, brought on by the disenchantment the social sciences - in this case, the educational sciences - had of over three-quarters of a century of trying to work in the sciences from the positivist paradigm. So this is when all the alternative methodologies made an important appearance, specifically those that come from a humanistic paradigm in their interpretative aspect. This appearance of the new paradigm also led to changes, not only in methodology but also in the choice of areas to focus on.

In the 1980's we saw a slowing down of work on curricula and on learners and studies started to center on an evaluation of schools, and also of curricula, teachers and learners, but from the perspective of the context or framework.

And since the beginning of the 1990's we have seen a growing interest, on an international level, in the evaluation of the educational system or systems.

Comparing our data with international data I get the impression that in Catalonia we are now following exactly the same tendency as the rest of the countries in western Europe. Whereas in the 1960's we in Catalonia might have been some eight years behind the tendencies of the rest of the international community and in the 1970's, about two years, at the moment there may be only a few months of difference. Our lines of investigation, then, go side by side with

those on the international level. It may be due to the ease of communications that the international community generally

participates more and more with the same data, with the same interests, which helps us to set our research objectives with more precision and may help in terms of quantity if not quality.

Evaluation started out as a completely static vision of what should be. Centered on nothing more than the students' learning, evaluation reflected the need to measure concrete learning in absolute terms. This model of evaluation, completely static rather than process oriented, was the common denominator for many years.

The change came when, in a time of economic strength, the systems' own needs pushed countries to make major investments in the development of educational systems. This came from the a conception of education as one of the most important imputs for creating wealth. The view at that time was that there existed a high correlation between education and wealth, and with the macroeconomic theories of the economics of education of the time it was thought that to invest in education, to invest in what was called at that time "human capital", was to ensure that you would later be able to reap fruits in the form of economic wealth.

With this type of reflection it seemed less important to test the worth of a system by testing nothing more than the students' outcomes, which unreasonably put the responsibility for whether the system was good or bad on individuals' shoulders. And this was one of the reasons why, in the 1960's, regardless of the fear all the countries had of lagging behind in the quality of technology and being left out of the mainstream of progress, they made a total change and stopped simply thinking about improving the students' learning and started to work seriously on evaluation.

Throughout the 1960's and at the beginning of the '70's, evaluation stopped being conceived of as simply a situation, a purely static question. Instead it was led back to a contextualisation, which relates to a process, a complex process of systematic reflection,

which leads to other types of processes such as collecting information, evaluating that information and then evaluating the decision-making processes based on all the information that has been evaluated and analysed. We could say that the impact caused by the whole technological contextualisation of a humanistic nature at the end of the 1970's made everyone - but especially the people situated within the paradigms least inclined to contemplate the holistic situation of educational phenomena - rediscover the importance of contextualising all educational phenomena when they want to evaluate.

In the 1980's, the first attempts were made to work on the general context, which is the context of the school, previous to any evaluation of curricula or students. At the end of the 1980's something else happened that I would like to mention, which is that, in these evaluation analyses dealing with schools, the vast importance of a specific evaluation of teachers was recognised, and today the teacher is clearly considered the most important aspect of educational quality in a school.

Now, remember that at this time, the late '80's, continuing education, innovation and the evaluation of teachers was a trio from which it is impossible to separate one of the elements. No self-respecting research into the evaluation of teachers did not in some way coordinate these three themes.

Then came the 1990's, and again there were structural changes which again caused, in my opinion, a change the very concept of evaluation. In the '90's, the whole western world headed into a great economic crisis which, according to all the experts was not momentary, as on other occasions, but structural. And most social concepts changed, especially those related to social spending and the new parameters under which our society would operate. Specifically, in education, which until now had thought that the best investment one could make in human capital was to train our students, the view of education as an input started, perhaps, to change into the view of education as an output; that is, it is not that education causes current wealth but that, perhaps, that education is a product of the

wealthy countries, the advanced and progressive countries; that the best indicator of whether a country is advanced in the modern sense is, in fact, education.

As the view of the role of education varied notably, so all the concepts of evaluation, which in our context are completely linked, changed as well. If education is a product, and an important product, if the economic crisis makes any increase or decrease in public spending less flexible, then automatically thinking that the money dedicated to education will be able to increase rapidly, like throughout the 1960's and '70's, is unrealistic. Education is a valuable thing to society, but valuable sociologically; it causes spending rather than wealth, and spending in education is subject to the same laws that rule for all valuable things in society. In a moment of economic crisis, in a moment of spending freezes, if you want to keep increasing, not so much the quantity as the quality of what we are evaluating, then you have to redistribute the economic possibilities in the most intelligent and rational way possible.

So yes, the evaluation of educational systems may turn into the most rational *modus operandi* for trying to redistribute all the resources dedicated to education instead of opting for other types of distribution which may be more arbitrary and certainly are more unfair. The importance of evaluating the educational system is not so much in capturing the quality of the system, but in establishing norms for political decision-making so that those aspects of the educational system most needing change by all the people responsible for it can in fact be changed.

This is the current interpretation, which also fits in with my own personal interpretation, which is, I believe, made in the centres of power. And this is where the new focus of interest in evaluation comes from. Currently, as you all know, when efforts to adequately structure the evaluation of educational systems are made at an international level and other areas, we center on the generation and adaptation of a series of Indicators. The OECD has been behind this trend and has intervened in a strong and decisive way in generating projects, such as

the INES project, to enable all western countries who want to share the same systems of indicators, develop the same habits and use them in the same ways. The study of educational systems from the perspective of these indicators obviously has a great relevance for the evaluation of teachers, the evaluation of pupils and the evaluation of educational systems. I believe this to be an essential task.

I also believe, however, that in the way we deal with as serious an issue as indicators, and, later, the way we organise the evaluation of the educational system of indicators, will determine the whole model of evaluation and the whole concept of evaluation. Normally the nature of indicators, whether qualitative or quantitative, and the type of treatment they receive later, is what we would call technical rationality. The indicator as it has been conceived will necessarily bring with it an evaluative model of an external type, a more quantitative type, within a positivist paradigm. I don't say that this is wrong, only that, if it does happen, it will always be only partially right.

Let me explain. Here in Catalonia we have, as far as I know, three institutions that all oversee the quality of education: the School Council, whose greatest responsibility, as I understand it, is to indicate the needs of our society and make direct requests to the Department of Education so they may take steps to meet all these needs. It falls, then, to the Department of Education, to try to give a valid or at least coherent response in the most intelligent distribution of the resources allocated to it. Next, we have the Higher Council of Evaluation, which has the responsibility of later checking that these needs set out by the School Council and these efforts of the Department have been correct.

If there is no link between these three evaluation bodies besides keeping abreast on what is happening by means of indicators, we will be facing ultimately what I call a model of evaluation of the International Monetary Fund type. What do I mean by this? We know that in Europe and in the world there are a number of organisations involved in making statistics, in classifying them and publishing them and then issuing

recommendations; then we come to a type of indication that is unlikely to have practical applications to reality afterwards. You will also remember that at the last meeting of the World Monetary Fund in Madrid, after many other meetings, after much protest, those who are supposed to be the most powerful thinkers of the whole OECD, of the whole West, came to the conclusion that the type of results that might offer solutions to economic problems is in increasing productivity and reducing salaries.

This type of pronouncement is what I would like to avoid being made in the field of evaluation. This is one of the concerns I have about the link there may be between the three major authorities for evaluation in Catalonia. As they say in Spanish, "*para este viaje no hacian falta alforjas*". You didn't have to go through all that.

What am I trying to say? That at this moment, with these institutions simply working separately, we get a type of work that only goes half-way to what I believe should be the modern concept of evaluation. If we agree to define evaluation as a process, a formative process, a process of data collection, a process whose mission is to reach some value judgements in order to be able to make decisions afterwards; if we keep to this type of definition, this type of perception of what evaluation is, we will surely end up with the reputable institutions in evaluation producing plans for resolutions without any real effect on improving the quality of education except in an external and very partial way.

What I mean is that our concern is for all the institutions and all our forces to make a real evaluative culture. To generate an evaluative culture is different from making evaluative actions; although these two things are related they are substantially different. It seems very clear to me that one thing is evaluating and another is generating an evaluative culture. I always give the same example, and forgive me if you have heard it before. I always remember the sad case of the former president of the Bank of Spain, Mr Navarro Rubio, who was someone who knew fiscal law - and our fiscal laws may be the most progressive in Europe - but in spite of this was discovered to be the first, or one of the

first, to try to hide the money and cheat the very Treasury that he represented. So one thing is the law, the rules, the generation of actions of a fiscal nature, but quite another is that the country, the society, be within a context of fiscal culture that would make situations like this unthinkable.

The same thing happens with evaluation. It is not enough to design processes and indicators; an evaluative culture needs to be created. I believe that the process of evaluating is also a context of axiological construction; it is also sumerging educational action in the critical context of the evaluative culture, rather more than just staying with processes. What is the concrete solution? Because it is very easy to talk about a culture of evaluation, it is very easy to try to look for this aspect of evaluation, but it is very difficult to indicate the way to do it. I would honestly say that between the three organisations I spoke of earlier - our Department of Education, Higher Council for Evaluation and School Council - a very important interactive space is being made which will need to be filled with what I would call an interactive network transmitting all the information that each of the organisations may create between each other and especially between them and the schools.

The schools are the basic unit for analysis where the synthesis is made between the external and the internal, the formative and the summative, and they need someone continually to make the interpretation of what comes from above and goes up. From the practical link that they will be able to achieve, from the good will, the good synthesis made with this link, within this circle, what I call evaluative culture will arise.

I would like to end with a warning and this summary of my talk. Looking over everything that has been happening in evaluative research, not only in Catalonia but also in the rest of the international community, seeing that there are different environments and methodologies clearly indicates the path of the future. But since this is really an important moment of responsibility for everyone, and since evaluation gives complete sense to all levels, we will have to keep a careful watch over any interaction there might be between institutions or bodies responsible for evaluation and the basic units where evaluative culture is produced and where it shines, that is, the schools.

Thank you very much.

THE TASK OF THE *CONSELL SUPERIOR D'avaluació del Sistema Educatiu*

Ms. Mireia Montané

Mireia Montané is Secretary of the Higher Council for Evaluation of the Educational System and director of the Office for Educational and Academic Cooperation with the Europea Community. These are both bodies of the Department of Education of the autonomous Catalan government, the Generalitat de Catalunya.

She has been involved with the IEA (International Association for the Evaluation of Educational Achievement) for several years, first with their Reading Literacy Study and now as National Coordinator for Catalonia of the Pre-primary Project, whose international coordination is headed by the High/Scope Foundation in Michigan (U.S.A.).

She is currently Vice-President of the ATEE (Association for Teacher Education in Europe), which means she will automatically become ATEE President in September, 1995.

She is a member of the RIF, the Network of Teacher Training Institutions of the Commission of the European Union, and she is Coordinator of Subnetwork 6 of the RIF on "Introducing the European Dimension into Secondary Education".

Ladies and Gentlemen:

I would like to begin my talk with some of the metaphors we often use when talking about Europe. We sometimes refer to it as a fortress: Europe as everyone's home. Today I would like to introduce Europe to you, if I may, as a set of interlocking Russian dolls.

Being the last to speak here today, after so many interesting talks, it occurred to me to make a game of it as teachers often do in class. When the students are very tired, you find a way to stir up their curiosity a bit. So I asked my friends to lend me all the Russian dolls they had (and I got quite a collection!) That's how I got all the sizes, from the smallest to the biggest.

When we want to know how the educational system works at each level within the European Union, we place ourselves at a certain level, for example, the level of the region. Let's pretend that one of the medium-sized dolls is a European region: Catalonia, for instance. We can compare ourselves with other areas, which can be bigger, like the other dolls - the Spanish government - or smaller - the local communities, such as the city of Barcelona, or even smaller, down to the smallest one, the school.

This is the unit that Professor Joan Mateo has told us is so important and that for me is the most important of all, even though it's the smallest. We have to be sure that the schools are accounted for in our evaluation; otherwise the whole point of a general evaluation is lost. Because really that smallest unit - the smallest of the dolls - the school - is what it's all about.

These different-sized dolls fit together perfectly. This would be the perfect model, what we all would like. Then we could confidently compare one level with another, since they all have elements in common.

But actually the metaphor of Europe that I like best is that of Europe as a garden. It is this "Garden Europe" that we all have to cultivate, at every level. And diversity has to be part of this garden: we're not going to make a whole Europe with just one kind of tree. I think it's nice in Europe to go to the Finnish forests, or the Mediterranean woods, or stroll through gardens in Granada or Crete or wherever. This is the great variety we have and we are lucky with the speedy communication and travel we have now, as Professor Mateu as many others of you have

mentioned, so that we can enjoy this variety so easily, so that in Finland they can eat oranges or here in Barcelona we can decorate our homes with Nordic design. We should take advantage of the new technologies to supplement what is uniquely ours within a unified Europe.

Now, I've placed myself at the level of the region. Until now, everyone this morning has spoken from the point of view of Europe, which makes sense since this European level is where we know the most about what's going on in terms of evaluation. But if we want to generate an evaluative culture, as we are now proposing, I believe it has to be done from the regional level down to the school level.

It is important for school directors to know about the indicators being developed by the OECD, or the IEA, or the European Union, or any other of the major international organisations. It is a big mistake on our part to assume that everyone already knows about them, because the general educational community actually does not. Now, how can we expect that reliable statistics be collected from the school level up to the European level if people don't know what they're all about or what good they are? We need publications and diffusion, we need the educational community to know what's being done at every level so they can really participate, since in the end, hopefully, everything will end up back at the schools, to improve them.

Professor Mateo has gone over for you the development of scientific thinking about evaluation. I will now look at evaluation from the political point of view.

Spain has had a constitution since 1978. With the Constitution, (which fortunately was accepted by all the political factions), Spain became a decentralised nation, with power given back to those regions which traditionally were autonomous, such as Catalonia. Catalonia could then reinstate its own government, the *Generalitat*. In 1980, the Statue of Autonomy for Catalonia went into effect, allowing the transferral of authority from the central Spanish government to Catalonia. This is when the Department of Education of Catalonia

started collecting its own statistics on the Catalan educational system.

In our country, as in most European countries, we are now in the midst of an educational reform. It touches on many aspects of the educational system and curriculum, but one of the most innovative aspects is making schooling compulsory for all children to the age of 16.

According to Article 62 of the LOGSE, (the General Law on the Organisation of the Educational System), which applies to all of Spain, every administration that has full responsibility for its own educational system may also have its own system of evaluation. This means that the Catalan educational authorities have the right under Spanish law to evaluate the educational system in Catalonia.

The Technical Commission for Evaluating the Plans for Experimentation was the first evaluative body, set up to attempt a full-scale evaluation of the Reform in the schools piloting it. In 1989 an exhaustive, rigorous study of inputs and outputs was carried out. This was the first major evaluation of the Reform, and the report, which revealed the really substantial costs of the Reform, was presented to the Catalan Parliament.

As the Reform became more and more widely implemented, a new evaluative body was set up, the Advisory Council for the Evaluation of the Implementation of the Reform. The first indicators appeared in 1982, and they have been updated periodically since then. The latest complete report covers the 1990-91 to 1994-95 school years. So now we have figures that apply specifically to our situation.

Finally, in December, 1993, a year ago, the new Higher Council for Evaluation of the Educational System was born. This six-member body (of which I am Secretary) is directly under the both the Secretary General and the Minister of Education of Catalonia. The statistics are done through a private data processing firm, and then we do the analysis of the results.

The main function given to the Council was research. Catalonia had already carried out

its own studies, such as those on the Reform and others.

Basically we wanted to do a large-scale evaluation of the educational system which would serve the interests of the state and European governments, but also the interests of the schools of Catalonia.

So one aspect of our work is to establish a set of indicators with an eye to improving education in Catalonia. Because of the importance of this task for Catalonia, a mixed commission has been set up consisting of our Evaluation Council, the General Planning Committee and Inspection. The first thing we did was to review all the OECD indicators to see which correspond to our figures, so that we might compare them with the rest of Spain and the other European Union and OECD countries. We have a long road ahead of us, a great deal of research that has never been done before, and there are likely to be gaps we can't fill. But now at least we are familiar with these OECD indicators. Only representatives of nations, not regions, are normally found in the OECD working groups, so it is hard for us to be informed, and until now we did not know much about the OECD indicators. After studying them we thought we could bring in our regional point of view, and that this could enrich the country's, if not Europe's understanding. Our point of view means our own indicators, and obviously no one can stop us from including information applying only to Catalonia.

The first question the Council had to deal with was what type of research to carry out. What type of data were we interested in getting? From the point of view of educational policy, what things was it in Catalonia's interests to evaluate?

We started by asking ourselves what was unique to Catalonia. The other day some visiting Japanese teachers told us they'd just been in France, where they'd asked teachers how they went about making French citizens feel French. Then they asked us the same question. Well, at first it took me by surprise, but it's clearly an important question.

Obviously we have the Catalan language which sets us apart from the rest of Spain.

But if we have our own language it's not for nothing; it's because we have a history and a culture that have generated this language. There are other things, also, that characterise us, such as our industry, our economy, and our professional training (What fields do students go into at university? What jobs are available to them when they graduate?). The specific nature of all these things in Catalonia make them worth evaluating.

Once we've decided what to study, we have to decide how to choose the sample and what methodology to use. The sample must be representative of Catalonia, of course, so that it can be compared later with the national level of the study. Considering the disparities that exist between the autonomous regions and Spain, if we have indicators at only the national level we learn very little about the situation of the schools in Catalonia and they are therefore quite useless for us. But on the other hand, making the sample truly representative of Catalonia involves a greater expense than if Catalonia were just treated as part of Spain. This, then, is one of the problems we have to deal with.

Another question is how to collect the data, whether, for example, tests can be administered by the teachers in the schools themselves or whether it should be done by outside people in the interests of reliability even though it increases the costs. Then it has to be decided how to treat the data collected. We are now trying in Catalonia to computerise the system to the maximum and systematise data collection to make it up to date. How to analyse and synthesise the results is another important issue. Do various reports need to be written according to whether the target is policy-makers, educational specialists, teachers, parents, or school directors, etc.? How can the time needed to carry out the study be reduced so that the costs will be as low as possible and the data will be up to date, without sacrificing the validity of the study? These are all questions we have to confront daily at the Evaluation Council.

The Evaluation Council cooperates with the Spanish Ministry of Education for evaluation at a national level. For example, this year collaborating, for example, Professor Fullat, the President of this Council, participates on

the board of the National Institute for Quality and Evaluation (INCE). We collaborate with the INCE on studies done at a national level. For example, this year we have started evaluating the first cycle of primary education under the Reform as well as the old primary system of EGB (General Basic Education), now in its last year in Spain. The next stage will be the evaluation of Compulsory Secondary Education (ESO) and Professional Training (FP). The Evaluation Council also belongs, to the Sectoral Education Conference of Spain, along with the other education ministers of the different autonomous regions with responsibility for education.

It is obviously in our interests to obtain data that can be compared. Ours is a region with a long industrial history, and it's natural that we should be interested in comparing our situation, not only with Spain but also with other, more developed countries. Our collaboration with the INCE also involves the participation in international studies, especially those of the IEA. We started first with the Reading Literacy study, many years ago, and then Catalonia alone participated in the Pre-Primary Project (PPP) on behalf of Spain. We are now working on the Third International Maths and Science study (TIMSS) and hope to participate in the Civics Education Study.

Participating in these international projects over these past four or five years has taught us a great deal in terms of negotiating, planning, applying measures, etc.

There is another very important thing about Catalonia working with the IEA. Spain's participation in the Language Education Study (LES) is going to be coordinated by Catalonia, and, as far as I know, this is the first time that a region of Spain should have this responsibility in an international study.

But another reason why this study is of special interest to Catalonia is that we have always been interested in foreign language education and have a long tradition in this area. First we have the Catalan and Spanish languages. Then we want our children to learn English, which will get them a lot further in international circles than Catalan. French has been traditionally taught in

Catalonia, since it this language belongs to a country that's very close to ours geographically and culturally, and we don't want to lose this language either. This four-language model has been used by Catalonia for many years, and we believe our experience will benefit Spain when they participate in this international evaluation study coordinated on a national level by Barcelona.

But we also adapt the measures to our own curricular framework in Catalonia. So in the tests, one part will be the same as what's used in the rest of the country, while another part will be specific for Catalonia. We want to find out which things are unique to our curricular framework and which are the same as the state minimums - minimums which are difficult to establish, as you well know, and which bring us so many problems!

So we have the evaluation programmes of our own educational system in Catalonia, then the international evaluation and coordination with international programmes.

Later on, we would like to belong to a data base network on educational studies and innovation, called "Redinet-Innovation". This nation-wide network has two aspects: university research and more applied research, or the research we are doing in collaboration with the University of Barcelona. This is the first time we will have an overview of everything being done in educational research and innovation in Catalonia, and it will be directly connected with the rest of the country and all the other universities.

Finally, we have the area which I personally find very important, in terms of transparency and accountability, and that is information management and publication. But, as Professor Mondon has said, it is important not to be too hasty in matters of evaluation. Naturally, we have to make the data available for public use, but it's true that very often the political decision-makers insist on having the results immediately, before the research is finished; we may lose a lot of sleep trying to meet these demands!

All of the effort and care required for a study to have a certain credibility is not easy

for a small country like ours.

It has been said that it's not until you try to do something yourself that you realize how hard it is. Apart from the scientific issues there are administrative problems to solve. You need to be clear from the start on how much funding you will get and how much can be accomplished with it; you have to set priorities and realistic goals according to the economic climate.

Everything must be done to ensure that the data be as reliable as possible if we are to know our educational system better and improve quality. Because, if I may repeat the Secretary General's words, it's not enough to talk about quality. We need to know what we mean by quality and what factors will help us improve considering the resources at our disposal.

Tools need to be created for the education of young Europeans, that is, specific organisations promoting European and international cooperation. I believe that we regions have to find our own mechanisms for participating in the process of European integration. We have to develop an educational policy of interregional relations, of cooperation across borders with neighbouring countries or countries geographically distant but with which we share the same educational aims.

Interregional cooperation can benefit our education and can make a big contribution towards constructing a Europe that is integrated, that is accessible to its citizens, and, perhaps, that is more democratic. By working together and comparing ourselves with all the different levels, we might illuminate our way and improve ourselves.

I would like to end on the principle of subsidiarity, which, as you know, is spoken of in the Maastricht treaty.

Subsidiarity within the European Union means that governmental decisions be adapted to the level closest to the citizen.

This is a criterion for the distribution of areas of responsibility among all the levels of government, guaranteeing to the local levels or regions authority over those things that they can deal with effectively.

This is an idea of decentralisation which should not, however, interfere with the construction of Europe.

On the 5th of December, the Council of Ministers of the European Union is expected to pass a resolution on promoting educational statistics in the EU. The resolution, while stressing that these statistics be comparable both within the EU and world-wide, also refers to the national and regional levels.

Now, since I began with a metaphor, let me finish with another. I assume many of you have read the book Treasure Island by Robert Louis Stevenson. It's the one where we're all invited to get on a boat and make a journey, in other words, to be dynamic and unafraid of discovering new things, new worlds. I know that there are 186 regions in Europe, and these are a lot of worlds to discover. But the challenge is to see how we regions in Europe can somehow integrate ourselves better into the construction of Europe. It is we, after all, who will be carrying out on our regional level the decisions taken at the level of the Council of Ministers, just as the Council of Ministers can hear the voice of the regions through the Committee of the Regions. We must be confident that at the end, we will find the chest waiting for us full of treasure - the diversity of the European regions.

Thank you very much.

COORDINATING EDUCATIONAL INDICATORS ON THE REGIONAL, STATE, EUROPEAN AND INTERNATIONAL LEVELS

Eugene Owen

Eugene Owen has a degree in sociology with an emphasis on the integration of qualitative and quantitative data.

He has taught at the university level and worked on management projects in the Caribbean.

He started working with the United States Department of Education in 1983 and worked for several years as the departmental official responsible for the National Assessment of Educational Progress (NAEP).

He coordinated the expansion of the National Assessment to include data representative at the State (regional) level. The cost of the programme increased from \$5 million/year to \$30 million/year.

For the past year, Mr Owen has been the director of a new unit in the National Center for Education Statistics to work on International Comparisons.

He also serves as the Chair of Network A on Student Outcomes for the OECD Indicators Report.

His interests include large scale assessment and development and management of data systems.

I want to start by giving you some background of where I'm coming from and why I'm working in this field. Then I'm going to give an overview of how we see indicators from a general perspective, and then I'm going to talk about specific indicator reports. I have four of them here that were produced in the United States and the OECD. I would like to go through the contents so you get an idea of what indicators are, what they try to do, and what the system of indicators tries to do, so that you'll have some sense of actual indicators and we can get to a more concrete assessment of what's been done. I'm not saying that this is the ideal - and that's one of the points here; I just want to give you some sense of what has been done in the very recent past.

I come from a qualitative background, and am very much sort of an ethnographer in rural systems. So I'm very, very distrustful on the place of qualitative information. So let me just start off from that point of view.

As my development progressed, I became more and more intrigued by the capacity of quantitative information to summarize in a way and give a sort of quick language to

enable us to discuss something without having to go into details all the time, which is what you often do in a qualitative approach.

I worked for many years on the National Assessment, which many people tend to say is the most expensive indicator in the world, to get a sense of performance, (often recorded as a "mean"). This is an indicator that is collected every other year at three different ages in one or two subjects; for example 9, 13 and 17-year-olds sampled in the country are given an exam, either mathematics, reading, sciences, writing, geography and history, and civics, or citizenship. This testing programme, which will result in one or several indicators a year, costs now 30 billion dollars annually. This is because we collect on a regional level. The states volunteer to do the testing themselves. This is as if all the regions in Europe decided that they were going to participate in a European-wide or international assessment so that there would be a way of preparing them on a common metric.

This outcome indicator is new. It only started in the United States in the early '90s. 1990

was the first part of it. And it is still called the "trial" state assessment, because we're not sure about it. No one wants to put all of their eggs in the basket, so to say. So it's still called "trial".

I want to talk a bit about my limitations in leading this kind of discussion. I have a general sense of the development of Europe over the last few years, but I don't know the particularities of all of your educational systems. The further west in Europe I go, the more familiar I am - Spain and Britain - but the further east I go, the less familiar I get with what the systems are like. I know that the challenges you have in doing the kind of correlation I'm going to talk about are greater. But I don't think they are insurmountable.

I want to talk about several topics. First I will just outline them and then I'll go into more depth: why we want to have education indicators for regions and why we wanted them in the United States; who the indicators are designed to inform; who is going to use the information; what I see as particular challenges for a Europe of the regions; what kind of indicators should be chosen; the content that has been chosen at different levels; and then finally, how do you harmonize - I would not say "rationalise", but how do you harmonize the collection and reporting of indicators at different levels?

We talked a little today about using the same indicators at all levels. Personally, I feel this is a Utopian outlook - not possible - but I'll go into specifics of what I mean by that.

Let me start out by what I mean by an indicator. (I think this is something that has come out of the discussion from yesterday, so I don't think I will be saying anything new.) An indicator is usually a piece of information, and often a statistic, that is used to monitor a phenomenon, provide a basis for planning or remediation, and to compare similar phenomena. So we use Indicators for those three basic purposes. Indicators in the United States are based on statistical information as well as other types of data. There are qualitative types of indicators. The difficulty is collecting those in a comparable way. I understand the scepticism Joan Mateo has expressed about indicators per se, but the

reason we use indicators, again, as I see it, is creating a common language in which people can talk about education in a way that abstracts us from individual experiences. And this is what statistics ought to be able to do - get something from our individual experiences that we can compare and talk about. This is a way of developing a dialogue - particularly among educators and policy-makers and citizens - so that we have to make a conclusion in a qualitative way.

Now, we as parents use indicators at the student level all the time. We want to know about the students' family background. What are their parents like? Do they have two parents? Are they coming from a single parent background? What kind of nutrition do they have? Are they getting adequately fed? - These are all indicators.

What kind of instruction have they received? Do they have one teacher; do they have several teachers? Are they getting any remedial teaching? How is the day organised? Do they have three or four subjects? Who is their teacher? Do they have the same teacher all day? All of these are indicators of inputs and processes.

What is the child's day like at home? Does he spend time studying? Does he go home and have to work (or does she have to go home and work)? These are indicators. These are things that we use every day.

And outcomes - we look at grades. What are the grades that the student brings home? Finally, what are the teachers' comments? Here we have the quantitative and the qualitative. We depend on the comments of the teacher. And I would say that these are all indicators at a student level.

So when we say that the notion of indicators is foreign to us, I think not. I think that it is something we are very used to. If we use a mechanical model, we use indicators as well. A gas gauge doesn't tell us why you put in the gas, what it's for, how far the gas will get us, but it does give us indications. The same thing with a thermometer when you take a temperature. If it's normal, it doesn't tell you why it's normal; if it's not normal, the thermometer doesn't tell you why. It is only indicators that really cause you to look

further.

Referring to the United States I will talk of regions as states - this is the area we use that would be comparable to your region, I think. Particularly I think it's comparable to Eurostat terminology. One difference - and this is a challenge that you have in Europe - is that in the United States, the states have responsibility for education. So we are developing indicators for a group and by a group that can do something about them. I am not sure but I think the level of responsibility for educational change and educational decision-making is very different among the regions in Europe. And I think this is a slight difference between the context I will be talking about and the context that you all are dealing with.

In the United States, the states use indicators themselves. Almost all the states have developed and use some sort of indicator system to monitor their individual progress. This would be comparable to the regions in Europe having their own indicator system.

What has happened over time is that these indicator-systems grew up in the states in a very idiosyncratic way, depending on what each state's needs are. There was a national indicator system. The difficulty was, "How do we relate what we're reporting at a national level with what the states have chosen to report?" And the states then began to ask, "How can I compare myself with what's going on? How do I, Catalunya, compare myself with Languedoc-Roussélon? How can I do that if I've developed my own system, and they've developed their own system?" This is when the federal government in the United States came in and said, "We'll help you develop a coherent, cross-regional, cross-state project." This is similar to the Commission of Europe. Eurostat's saying that they will help the regions and work with the regions. I want to tell you that this is a very expensive proposition. It takes a lot of investment by the central government as well as the individual regions.

How do you get the competency levels necessary for making a system of indicators in all the regions? Catalunya is a very, very developed region. What do you do with a

very, very poor region, say a very poor region in Portugal or Greece - or even a state - that may not have the same competency in statistics, etc.? In the United States we have a long training period. I would also like to say that this is in evolution. Don't expect that once you've made the decision that you're going to have indicators, all of a sudden you'll have a wonderful indicator report come out tomorrow. This is part of the difficulty of realizing that this is a developmental, evolutionary process, not something that happens overnight. It also takes a lot of work.

Now I want to turn to the question of who uses this information. In the United States, the state legislatures - which would be your regional parliaments - the governors, the national Congress and the Departments in charge of education all use indicators to form a dialogue. It is a way of being able to talk about similar phenomena and to make decisions. France has a very developed indicator system - not at the regional but at the national level for decision-makers.

In international comparisons - in all of these kind of indicator reports you have the people that collect the data, the people that provide the data, and the people that make the interpretations. In international reports - in the INES project for instance, the data is collected by the countries and it's reported by the countries, but the interpretations are made by an international body. This is a very important point - who provides the data, and who makes the interpretations.

In the United States, we have national data that we make interpretations from, but we also use international data and make interpretations from the United States point of view. Regional data is collected and reported at a regional level. The regions make an interpretation of it, and the national government makes an interpretation of it as well. At the national level we also take international data and regional data and put it together and make an interpretation from the national level. In this case it's not an interpretation the states have done, it's an interpretation that the OECD has done, it's data that's been collected by other people, that we've taken and then done our own interpretation with. There are others where

countries provide the data with an international interpretation. There are others with national and regional data, such as the national indicator report of the U.S., which is done at the national level. There are others where international data and regional data - not national data - is taken by the national government. And finally there are those that take regional data, national data and international data, and do the interpretation from a regional point of view.

So all of these reports have a different mix of data use and data providing. The major point here is that, even though we're talking about some of the same indicators, their use seems very different, depending on who's doing the interpretation.

Another thing I need to talk about is the burden. To provide the information gets very burdensome, and who does it usually fall on? - the schools. And you go back again and again and again for information. If I have to have a school report, a district report, a regional report, a national report, and an international report, and they all need different data, this is extremely burdensome on the local school. Some way that needs to be rationalised. We have had a system in the United States of voluntary testing. I don't know how much you can coerce your schools in your countries, but we can't coerce them at all. And we have finally come to the point where the schools are saying, "no, I can't take any more instructional time to fill out another report, another questionnaire, give another test."

Again, information isn't inexpensive; it isn't free. It costs a lot. And you have to go into it knowing that the information is not free. It costs a lot, as you know - you have departments to deal with it. The more information you collect, the better people want it to be, and the more indicators you have, the more questions they raise. As we say, they indicate something. A thermometer doesn't stop at just knowing the temperature. If you're a person that's sick, you want to know why. Or the person that's extremely healthy, you want to know why. So what happens is that it increases the need for more information as the dialogue that you've been able to create by indicators becomes more involved.

We have been talking about some of the particular challenges in Europe. I don't want to go into the details, but I want to review a little what has been said. First of all, what Bettina Knauth talked about: What is a region in Europe? Do you want to talk about regions that have authority for education, or not? Who gets to decide what a region is? Do the states decide what the regions are? Or do the regions self-select? Does Eurostat decide? And this is a very important question, because the kinds of units that you collect data on depend on the kind of information that you can use. For example, if you were to collect data on one level of regions in Spain, and a different one in Portugal or France, it wouldn't do you a lot of good when you're making comparisons.

Secondly, who controls these indicators and how they are interpreted? In talking about a Europe of the regions, we've sort of forgotten about a Europe of the states. Who gets to interpret the data? Do the regions and Eurostat get to say what the data will say without having a voice from the minister of education in France or some other minister of education? This is a big question that arises from the report that the regions did, which is very contentious. And the reason it is contentious is that the regions and the governors are making statements about the nation as a whole.

Generally speaking, the regions publish reports about themselves in comparison with other regions, but wouldn't try to make statements from a national view about the regions. For example, in an assessment where all of the states take the same test, California could write about what's going on in California compared to other states, but it wouldn't try to talk about what was going on in Vermont, or what was going on in New York. It would only make statements about what is happening in California compared with Vermont or Tennessee, but not why things were happening the way they were in Vermont or Tennessee. Catalonia would make decisions about what was going on in Catalonia, but not make statements about what's happening in Galicia or Andalucia.

This gets to be very touchy, as you can imagine. Again, what is the long-term outlook for international comparisons of

indicators? Where does this lead you? What is your ultimate goal? Is it to have a system of information where the regions could help one another, make changes? What are your steps for action? I'd like to let you think about this a little bit - what do you want to do with this information after you have it?

Our major audience for the Indicators that we collect at the federal, or national, level are researchers and policy-makers at the national level. Congress and the Department of Education and the President are the ones that use our reports more than any. We have lots of requests at the national level. States use our national data as a reflection point. Because they have collected their own data, they use the national data as a way of saying, "This is where we fit in to the national picture." There are actions that can be taken from a state level indicator, or a regional level indicator that can't be taken at a national level.

International indicators in the U.S. are used primarily as a benchmark for both the nation and the states. "This what they're doing in France or what they're doing in Italy or Spain or Japan or Germany - This is how we fit into it." That's why the report that we did where we compared the states to other countries was extremely popular in the states. This is something that they didn't have the resources or capacity to do. And so the fact that the national government did an international and regional comparison was extremely valuable to them.

Let me talk a little bit about what kind of indicators to choose. Yesterday, Alain Michel talked about the basic model that's generally used, which is the inputs of the education, the processes of the education, the outputs of the education, and something that's around it, which is the context of the environment. This is more or less the system that's been accepted implicitly, if not explicitly in all the indicator systems that I'm talking about - that national, international and regional.

The focus very much depends on the level and what the level of responsibility is. At the state level, the regional level, there's a lot of focus on process. Because the region is what sets curriculum, what talks about training strategies, what talks about requirements for

teachers, so there's a real emphasis on that level of indicators, on process. At the national level and at the international level there's a focus on inputs and outputs, because we can't, at the national and international level, have a lot to say about the process aspect. So you will tend to see international and national reports very heavily focused on inputs, finance, student characteristics, and outcomes - graduation rates, entrance into the labour force, student achievement. Internationally, the focus traditionally has been on the outcomes. The IEA system for secondary and elementary education has been the focus of creating indicators over the years. What has happened is, all three levels have now started to focus on those areas that they hadn't in the past.

Let me just give you a little run-down on the OECD. I think the important aspect to know about the OECD project besides the report, which can be criticised under a variety of both data and choice levels, is the importance of having the countries come together in a series of networks to make decisions. There are four networks in the technical group. The first one, A, is on student outcomes, which focus on achievement, and, as Lucio Puchi was saying, cross-curricular competencies of the problem-solving, self-concept of students, values and democratisation. And the goals of education are seen to value the outcomes and it's the national goals that transfer the curriculum into practice.

Network B looks at the economic outcomes of education - entrance into the labour force, etc. Network C talks about the black box, that is, teachers and school processes. And from my experience this is one of the more problematic. Not problematic from a data position point of view, but in terms of figuring out what is comparable at an international level. Network D is, I think, one of the most innovative.

Finally, the technical group, which is seen to be more routine, less experimental than the other networks, deals with finance and student enrollment.

Next I would like to talk about what we do with these indicators? One is information, and this, I think, is the most important aspect of these reports, that the public gets to see a

snapshot in a way. And we have public advertisements about international comparisons. Just before I got on the plane on Friday night I saw an ad. It was a very graphic ad, and it was designed to make a point and it was overstating it a little bit. It showed a row of students at their desks and it had a picture of an American student and students from a whole variety of other countries, and it said, "On a recent test in mathematics, 13-year-olds in the United States were 14th." So it visually had this American student going back to the 14th seat in the back of the room. It was making the point, "Is this where we want American students sitting?", you know - the whole national pride - "Is this where they should be?" So I'm saying that indicators are a type of shorthand used to communicate problems with an education system. So I think informing the public is one use of indicators.

Another use, and I think probably one of the most important, is as a basis for decision-making. If you believe in a scientific model, if you believe in the notion that information is better than no information to make decisions, then this provides an information base that people can argue about which is a little bit removed from their own experience. And it gives a way of making decisions based - hopefully - on some sort of representative sample or some basis other than opinion. Which is not to say that opinions won't play a role in decision-making. But at least indicators give you some information to discuss.

They also provide a basis for further input. What these reports do when you send them out is stimulate more research, more questions. If somebody sees a figure, an indicator, and they don't know what it means or why it's that way, it gives you the chance then to engage in a dialogue about what's behind the indicator. If they hadn't had the indicator, there would have been no point for jumping off into the discussion. You would not have been able to find a common ground. So it provides you with a very good point or points to say, "Why isn't this working? Why are you telling this? What went into this indicator? How did it happen to be this way?"

Another positive aspect, at any level, is a diagnosis of the health or lack of health of an educational system, or of the efficiency or efficacy of a system. And it is used very much as a diagnostic tool so that decisions can be made.

We talked about the positive aspects of indicators, and now we'll go to a sort of dark side of them. And the point I want to talk about here is accountability. This is the way critics often use them, and people on the steering committees, to make what we consider mega-decisions about people and about students.

Okay, now the last point I want to turn to before I go into some of the contents, are ways to harmonize the different levels. And I know only one good way to do that and it's collaboration, collaboration and collaboration. There is no substitute for groups at the different levels working together at all stages.

In the development of the indicators, what it is that we want to indicate? What are the data sources for the indicators? There are as many arguments about where the data comes from and who you should believe, as what the indicators are. And unless you can agree on data sources, you may never get anywhere.

How the indicators are calculated - how are we going to use the data and how are we going to report it? Do we want it generalised? Do we want to adjust them for other background characteristics? We talked about the lead tables yesterday. Do we want to adjust them? All of these are very, very important questions to resolve.

How are they reported? Are they a slow report, or do they come out in a quick report? Who reports them? Who gets to say what? Who does the interpretation? Who writes the report?

After the report is written, who gets to say what the report means, and whether it's good or whether it's bad? - the interpretation of the report. This is sort of the press conference, the publicity, after the report is written.

And finally, how are they going to be financed, how is the system going to be financed? Too often people assume, well, the national states will pay. Well no, the international group will pay. Well no, the regions will pay. No, the schools will pay. And so, this is an excellent exercise in "it's not my job" and "it's not my responsibility." The truth is, if you start on a collaborative effort, it's everyone's responsibility and everybody has to put something into it, either time or money. Too often, the higher you get, the more people think that people below should pay. And I would give you that warning as regions: don't let that happen. International or national organisations think, well, you're collecting it anyway. You're not. International organisations have to know that there's a cost for you providing the information for them. National organisations have to realise that there's a cost for regions providing them with information. This is a slow realisation. And I would say that it's taken us thirty years in the United States to come to it. This is still not the case in the international world. People think that it comes out of the hide of regions' resources or national governments. It doesn't. This will not support the level of information that countries or governments or international organisations need.

There is no substitute for regular meetings. We have - and this is why I think OECD has been as effective and successful as it has, - continual meetings of the networks to continue to work out problems every step of the way. If we didn't, it wouldn't work. We do the same thing with the regions. We have three or four meetings every year to talk only about data or indicators. They are week-long meetings in which we bring someone from each state in to talk about the data that's needed for this next or these next reports, and how we all collect the same data. It is an on-going process. People change, the governments change. You can't say, "well, we did that in 1992, it'll last until the year 2000". It doesn't. 1992 lasts until the fall of 1992. And the spring and summer and fall of 1994 last until the spring of '95. You can't say, "We've done it". It's just something that has to be done. You don't say, "I've fed my children, I've done it."

Okay. This is then the joyful side - the collaboration. Now the flies in the ointment, that is, difficulties. The problem is that at each level, people have different purposes. And so what the collaboration comes to at any stage is hammering out common purpose. And everyone has to give a little and realise that if you're going to have a common indicator, there has to be give and take on all sides.

The problem, again, also arises - and this is something that Bettina Kanuth has been talking about - is the appropriateness of the data and the quality of the data. There are arguments about, "Well, I collected it so it must be good." Well that's probably true for your purpose, but the question is, is it appropriate for the purposes it's going to be used for by someone else? We're not questioning your or anyone's professional abilities when we ask about the quality of data; what we're doing is talking about whether it is appropriate for the use to which it's going to be put, or whether it will work at another level.

Finally, what I would like to talk about a little are the contexts, to give you a sense of what the indicators are that have actually been reported. Because I think we've been talking in generalities about indicators. Let me start with one from a series that's about twenty years old, The U.S. Condition of Education, which is a thick indicator report. Every two pages is statistics and then discussion on a particular indicator. There are sixty of them in this report. And they break down to "access, participation and progress", and we're talking about the contents, "achievement", "the curriculum", "economics and other outcomes of education", "size", "output of educational institutions", "climate" - and here we're getting onto more qualitative ground - and "diversity", and "human and financial resources of educational institutions". So as I was saying, we have very little on process. The majority is on the context, the finance and the outcomes.

Education at a Glance, the second edition, had 38 different indicators. And they were in the context of education, costs, resources,

and processes - processes wasn't going to stand by itself so we put inputs and processes together - and then the results of education.

Another report, which is regional level indicators compared to international, had 16. It was thought that, after having Education at a Glance (and this is quite a glance - a glance usually means to look once quickly and then look away - this is a very, very long glance!), this one could be reduced to just 16. So again, it's the idea of having one page for data and then a graphic representation and a few comments. So it's simple. This was extremely popular among the regions; the governors and state legislators and state education agencies loved this, because it was the first time that you could see how California does compared to Italy or compared to Germany. This is what people had always wanted to know and were afraid to ask. Those were the background indicators. There were four background indicators, four participation indicators, four outcome indicators and four finance indicators. So we tried to give equal time to the different areas when we did this report.

Finally, how many of you have heard of the National Goals in the United States? Does

anyone know about the National Goals? (Our Mexican friends do! That's good - at least we're getting through to North America!) This is a pact between the governors of the fifty states, the president of the United States - Bush, when he was president - the state legislatures and the national Congress. All four groups have decided there are eight National Goals that they will all strive for. One of them - and the one that causes great mirth - is to be first in the world in maths and science. We have other, less ambitious goals - well, I think they're less ambitious: to make sure that all students are ready to go to school (whatever that means), that all learners will be lifelong learners, that students will be able to master four challenging subject areas, that we will have safe and drug-free schools (which may to you seem like a silly goal, but you have to come to America and see for yourself how important that goal is). And that teachers and parents will have a role in educational decision-making.

This group of governors and Congress puts out an annual report of how far we're getting in achieving these goals. And there's something on every state. And they also, coincidentally, picked out 16 indicators. They're a little more idiosyncratic, and run the gamut. They aren't just indications, but they have to do with education, so let me just go through them. They have a children's health index - how healthy are the children? What kind of diseases? Immunisations? - You know, we don't have national health care, so this is an important thing. A family-child indicator: reading to children and story-telling - very strange indicator, but an indicator of family involvement in early childhood education. Pre-school participation. High school completion. Mathematics achievement. Reading achievement. Then, international mathematics achievement. International reading achievement. Science achievement. Adult literacy. Participation in adult education. Participation in higher education.

Overall student drug and alcohol use. The sale of drugs at school. Student and teacher victimization. And disruption in class by students. Then there are four other areas to look at: inequalities among the states, by ethnic and racial groups, among children's health, high school completion, math and reading achievement. So that we can get at some of the regional disparities or state disparities and what the states do.

Well, as you can see, we are awash in indicators in the United States at all the levels. Having this kind of information is being moved to the district.

Or what was basically the local education authorities are starting to have one-page indicator reports to send home, which use some of the data collected at the district level and the school level. There is a great appetite for this information. The difficulty is, it doesn't get digested equally well.

I was fascinated by the article that came out on Sunday about the figures, the lower scores on Catalan compared to Castilian in Catalonia. Of course, that is an indicator, but it makes you ask then, "Why is this happening? What's going on?" And there

wasn't a lot of explanation in the article that I read - and I did read it in a Castilian language newspaper; the question might have been dealt with in a Catalan-language newspaper - of why this is happening, what is going on - in an area that is trying to

reestablish a region, a national language, what are the barriers to performance in that language? So what I would say is, indicators always will lead to more questions, which we may or may not be prepared to answer.

Thank you very much.

LE PILOTAGE DES SYSTEMES D'ENSEIGNEMENT

Gilbert de Landsheere

Baron Gilbert de Landsheere, est né à Liège en 1921

Fonctions actuelles

Président de la Fondation Universitaire de Belgique

Président de l'International Academy of Education

Président de la Fondation des Régions Européennes pour la Recherche en Education (FREREF)

Vice-président honoraire de la Fondation Roi Baudouin

Membre du Conseil du Bureau International d'Education (BIE-UNESCO)

Membre du Comité directeur du Centre pour la Recherche et l'Innovation dans l'Enseignement (CERI),
de l'OCDE

Consultant UNESCO, Conseil de l'Europe, commission des Communautés Européennes

Administrateur permanent de l'Association Internationale pour l'Evaluation du Rendement Scolaire
(IEA)

Member de la Commission de qualification du Fonds National de la Recherche Scientifique (Belgique)

Membre du comité de rédaction de revues scientifiques

Revue française de pédagogie, Education (Belgique), Education et Recherche (Suisse), Paedagogica Experimentalis, Rinascita della Scuola, Scuola e Città, International Journal of Educational Research (USA), Advances in Education (UK), Revue Internationale de l'éducation (UNESCO), Recherche-Formation, Journal des recherches sur la formation des enseignants, Revista Portuguesa de Educação, Golem (Italie), Syllabus (Yaoundé, Cameroun), Seleinfo-Formazione Professionale (Milan), L'année de la recherche en éducation.

Introduction

Etymologiquement, l'idée de pilotage (*monitoring*), de guidage est inhérente à celle d'éducation - ce mot ne vient-il pas de *ducere*? En effet, éduquer, c'est *conduire* vers un état souhaitable. Le guide doit non seulement connaître le chemin, mais aussi veiller à ce que l'on ne s'en écarte pas au risque de se perdre. Il doit, en outre, respecter la liberté du voyageur, car, par cette liberté, l'éduqué est sujet au même titre que l'éducateur, particularité qui fonde même l'*education* au sens noble du terme.

De façon plus directe, le pilotage peut se définir comme la prise de décision au niveau macroscopique (c.-à-d. d'un système ou d'un sous-système éducatif) ou microscopique (c.-à-d. d'un établissement, voire d'une classe),

sur la base de constats aussi objectifs que possible, relatifs à l'état, au fonctionnement ou aux produits des systèmes. Ces constats ne parlent pas d'eux-mêmes: ils sont l'aboutissement d'une construction de sens à partir d'informations qualitatives et quantitatives traduites en *indicateurs*. Des décisions peuvent ainsi être prises en meilleure connaissance des tenants et des aboutissants des choix.

Dans la gestion macros-copique, les données qualitatives ou quantitatives, dont les *indicateurs* sont issus, sont généralement collectées par des spécialistes, tandis que les décisions appartiennent aux politiques, qui agissent de façon plus ou moins démocratique. L'instauration d'un pilotage doit toujours

être précédé d'une réflexion approfondie sur le projet éducatif, aussi bien dans le monde politique que dans la société civile. C'est de l'aboutissement, toujours provisoire, de cette réflexion et de la clarification des enjeux politiques que doivent dépendre les lignes de forces du pilotage.

Cette clarification concerne en premier lieu les buts et les objectifs, dont le choix dépend, en dernier ressort, de jugement de valeur. Or, en matière d'enseignement, les intérêts divergent et les valeurs aussi. Elles divergent non seulement au niveau des pouvoirs organisateurs, mais aussi de ceux qui réfléchissent à la fonction de l'école dans la société, et des consommateurs qui sont les élèves et leurs parents. Seule une négociation politique permet de s'accorder ou de trouver des compromis à propos des buts de l'éducation.

Sans qu'ils puissent faire la décision, il appartient aux spécialistes d'aider à définir les enjeux et d'imaginer des solutions à proposer aux acteurs sociaux. Comme le souligne G. Fourez (communication personnelle), "le spécialiste ne peut fonctionner adéquatement comme un expert neutre qui présenterait des contraintes absolues et des solutions uniques, mais il a sa place comme <représentant> des contraintes et comme créateur de solutions nouvelles, dans un débat socio-politique".

De nombreux pays mettent actuellement en place des systèmes de pilotage de plus en plus sophistiqués. Les raisons de cette décision sont d'ordre culturel, social, politique, économique et budgétaire. Culturel, parce que dans une civilisation où l'intelligence et les connaissances deviennent les matières premières les plus importantes, une éducation de grande qualité est indispensable. Social, parce qu'il s'agit d'assurer, parmi les citoyens, une meilleure égalité dans la diversité. Politique, parce que des décisions qui engagent des citoyens doivent être solidement fondées. Economique, parce que le sort des entreprises est lié au niveau de connaissances de leur personnel. Budgétaire enfin, parce qu'une éducation de qualité, idéalement pour tous, coûte cher, alors que, surtout en période de crise économique, il importe de tirer le meilleur parti possible des ressources dont on dispose.

Bref, deux préoccupations qu'il importe de concilier dominent: 1) L'éducation permet-elle à chacun de réaliser son projet personnel? 2) L'éducation arme-t-elle bien les nations et les individus appelés à faire face à la nouvelle Révolution industrielle et culturelle qui se produit dans un contexte universel.

L'un des facteurs les plus déterminants de cette révolution est l'explosion des technologies "dont la croissance quasi cancérigène menace l'existence même de la société, en même temps qu'elle crée de prodigieuses opportunités pour l'humanité" (Gonod, 1990, p.2). Ainsi s'explique l'importance à accorder à l'évaluation de l'impact social de ces technologies, et le pilotage tel qu'on le conçoit aujourd'hui en est une.

Comme le souligne J.E. Charlier (communication personnelle), on ne peut éviter "une tension idéologique forte entre ceux qui estiment que l'école est une institution chargée de fournir à la société ce dont elle a besoin, si nécessaire en faisant violence à ses usages, et ceux qui considèrent qu'elle doit répondre aux besoins des élèves. Postuler que les deux vont de pair, se combinent naturellement de façon harmonieuse, relève de l'utopie". Les possibilités d'actions que l'on veut constructives dépendent toujours de compromis, par définition insatisfaisants dans l'absolu.

NATURE DU PILOTAGE

En matière d'enseignement, on distingue trois types de pilotage (C.E. Richards, 1988; V.de Landsheere, 1992, p.475):

- Le **pilotage administratif** (ou monitoring de conformité)

Il veille au respect des dispositions réglementaires. Il s'agit d'établir si les écoles atteignent un niveau d'exigence prédéterminé. Dans ce cas, l'unité est souvent l'école ou le canton scolaire.

Les questions posées sont du type:

- * Les enseignants possèdent-ils les titres requis ?
- * Les curriculums mis en oeuvre correspondent-ils au projet pédagogique ?
- * Les équipements (bibliothèques, salles d'ordinateurs,...) sont-ils satisfaisants ?
- * Les transports scolaires sont-ils assurés dans de bonnes conditions et répondent-ils aux besoins ?
- *Etc.

Ce type de pilotage présente deux caractéristiques majeures:

- * Il porte principalement sur l'imput.
- * Il a pour but principal d'assurer un niveau de service adéquat. Les critères de conformité sont définis par des lois, des règlements ou des instructions administratives. On évalue généralement sur place, notamment à l'aide de checklists.

- Le pilotage formatif (ou pilotage diagnostique)

Il est axé sur les individus. Par exemple, l'administration périodique de test centrés sur les objectifs, couvrant l'essentiel d'un programme d'études, permet d'identifier les problèmes d'apprentissage qui peuvent se poser, dans un environnement scolaire donné, et d'en chercher la solution.

- Le pilotage du rendement scolaire

Il est généralement réalisé à l'aide de test normatifs informant de façon comparative sur ce que "produisent" les écoles et les classes d'une région, d'une province ou d'un pays.

Le pilotage du rendement peut être conçu dans deux perspectives différentes. Selon nous, il doit essentiellement fournir des informations comparatives destinées, d'une part, aux pouvoirs organisateurs soucieux de connaître le niveau général et le degré d'homogénéité du produit du système, et d'en informer la communauté éducative et, d'autre part, d'informer *confidentiellement* les enseignants de la situation de leurs classes par rapport aux autres. Dans cet esprit général, les publications de résultats ne permettent jamais d'identifier les écoles. On rencontre une autre conception, notamment aux Etats-Unis, où l'on applique la

loi du marché au système scolaire : informés des résultats de chaque école, les parents peuvent choisir les "meilleures"...

Modèle technologique - Modèle humaniste

De façon schématique, on oppose deux types de gestion des systèmes d'enseignement : le modèle technologique et le modèle humaniste. Il ne faut toutefois pas simplifier outrancièrement: le modèle technologique n'exclut pas un certain débat démocratique, tandis que le modèle humaniste n'est pas incompatible avec l'utilisation des technologies.

Appliqué à l'éducation dans sa forme la plus accusée, le modèle technologique privilégiant les facteurs socio-économiques peut se décrire de la façon suivante. Après une analyse des besoins, qui dépend de choix de société, des outils d'analyse et des options théoriques, et où le facteur économique occupe généralement une grande place, on assigne des objectifs à travers un programme plus ou moins impératif, on recherche les moyens les plus efficaces et les moins coûteux pour le mettre en oeuvre et on évalue le *rendement*, c'est-à-dire le niveau des performances réalisées par les élèves, au terme de chaque étape des études.

Dans cette perspective, le pilotage consiste à mettre en place un dispositif de surveillance permettant de réajuster le système en réaction aux signaux, aux clignotants qui avertissent de déviations ou d'inefficacités. Une telle gestion relève de *modèle centre-périmétrie*: un pouvoir central s'exerce de haut en bas d'une hiérarchie.

Cette démarche technologique doit, comme les autres, faire l'objet d'une *évaluation sociétale*. Elle porte sur la nature, l'importance, les incidences, avantages relatifs d'un progrès technique, ainsi que sur les conséquences à court et à long terme pour l'économie, la politique et, plus généralement, pour la société globale.

Un autre aspect doit aussi faire l'objet de beaucoup d'attention : celui de la maîtrise démocratique des outils de pilotage. Le

problème est épineux, car, dans la situation actuelle, la plupart des enseignants ne sont pas familiarisés de façon suffisante avec les méthodes et les techniques - de plus en plus sophistiquées - de l'évaluation. Or, comme le souligne lucidement Gonod (1990,p.8) "la démocratisation du contrôle postule la démocratie participative couplée avec l'émergence d'une culture technique de masse par la démocratisation des connaissances et de l'information technologiques".

Le modèle parfois qualifié d'**humaniste** met les facteurs psychologiques au premier plan. L'expérience telle qu'elle est vécue par chaque personne et le sens que celle-ci lui donne sont les principaux objets d'étude. Le souci constant est la dignité et la valeur de chaque individu; il doit lui être permis de développer le potentiel qui est le sien. Une place importante est accordée à ce que l'on pourrait appeler une saine déviance, c'est-à-dire à l'expression de talents propres, et à la faculté de suivre librement le chemin que l'on choisit pour réaliser l'actualisation de soi. Entre soi, c'est pouvoir diverger. Dans ce contexte, les sentiments et les valeurs ont toujours droit au respect et l'individu reste libre de construire son avenir. La liberté, l'amour, le don de soi, l'adhésion à des valeurs, l'autodiscipline, la loyauté, la créativité, l'espoir passent à l'avant-plan.

"La finalité de la maîtrise sociale de la technologie", écrit lucidement Gonod (1990, p.10), " c'est sa régulation en fonction des besoins de l'humanité, si l'on se place sur le plan global des sociétés et des collectivités, et, en définitive, des individus.

Le modèle périphérie-centre, qui se veut humaniste, s'oppose au précédent. Il tend à décentraliser la gestion du système éducatif et à donner un pouvoir d'initiative maximum à la "base"

Cette tendance à la décentralisation est nette, non seulement vers les régions, les communautés éducatives locales, mais aussi vers les établissements encouragés à formuler un projet propre, ce qui implique aussi bien une certaine indépendance dans la gestion, l'utilisation des ressources, la conception du curriculum, que dans la formation ou le perfectionnement du personnel."L'autonomie est sans doute l'expression la plus adaptée de

la modernité, la clé de voûte de toute entreprise de rénovation.(...) Elle n'existera réellement que si elle apparaît dans la gestion quotidienne des établissements". (Dupont, 1988, p.150).

Attitudes technocratiques - Attitudes démocratiques

Bien que presque toujours soucieux - à des degrés divers, il est vrai - des valeurs sociales et humaines, tous les pilotages font appel à des technologies. Certains accusent cependant un caractère technocratique très marqué en ce sens que les savoirs scientifiques et les techniques sont censés directement fournir à la société des solutions à ses problèmes: le débat politique, caractéristique des démocraties, est ainsi escamoté. D'autres pilotages suivent, pour emprunter les catégories de J.Habermas, une logique de décisionnelle, laissant aux décideurs politiques le choix des objectifs et prétendant se situer simplement au niveau des moyens. Cette manière d'aborder la question laisse déjà plus de place aux débats et aux négociations politiques, au moins par rapport aux finalités, - même si l'approche reste technocratique par rapport aux moyens. Enfin, le modèle pragmatique de Habermas souligne la nécessité d'un va-et-vient continu entre les analyses scientifiques et techniques, d'une part, et la détermination des buts, d'autre part. Cette attitude rend une place au débat politique, y compris à propos des contributions des spécialistes. Elle est essentielle au développement de la démocratie dans une société technologique.

Ces différentes attitudes ne sont pas basées sur une utilisation ou sur le mépris des technologies. Des tenants du débat démocratique, à tous les niveaux, peuvent accepter pleinement tous ce que les technosciences leur offre. Et des technocrates peuvent être très soucieux des conséquences humaines et sociales des décisions. La différence réside essentiellement dans la place qui sera réservée aux experts. Dans une approche technocratique, leur pratique est considérée comme socialement neutre, tandis que, dans le modèle pragmatique, la parole des spécialistes a sa place dans un débat de société.

Macropilotage - Micropilotage

Le macropilotage

Tout pouvoir organisateur d'enseignement assigne des objectifs au système dont il prend la responsabilité et la charge. En démocratie, ce choix résulte d'une concertation entre toutes les parties intéressées, concertation qui s'appuie ou débouche sur une adhésion aux valeurs qui fondent les décisions. Les objectifs sont relatifs aux savoirs, aux savoir-faire et aux savoir-être.

Que l'on s'efforce d'établir dans quelle mesure les objectifs sont atteints et de prendre, à tous les niveaux, les mesures adéquates pour qu'il en soit ainsi, est non seulement un acte de raison, mais aussi un devoir civique: la communauté a le droit qu'on lui rende des comptes à propos d'actions dont la réussite conditionne largement l'avenir des jeunes et de la société globale. En cas de carences ou d'insuffisances, les causes doivent en être recherchées et les remèdes doivent être appliqués.

Cette démarche générale fait l'objet du pilotage macroscopique. Il tend à se focaliser sur l'*input* et l'*output*, et est, pour cette raison, souvent qualifié de *technocratique*.

Pareille accusation peut être injustifiée. Par exemple, n'est-il pas capital d'établir quel pourcentage d'une population scolaire a acquis une maîtrise suffisante de l'habileté de lecture, sachant notamment que le niveau moyen de lisibilité des textes que l'on rencontre dans la presse quotidienne ou dans les entreprises est de *x* ou *y*. S'ils n'atteignent pas ce niveau d'habileté, les jeunes ont peu de chance de trouver un emploi, les entreprises manqueront de main-d'œuvre qualifiée et les citoyens ne seront pas armés à suffisance pour jouer pleinement leur rôle dans la société.

Ainsi orienté, le pilotage, revêt un caractère indiscutablement technique (le condamner pour ce motif relèverait de l'irresponsabilité).

Les éducateurs n'ont aucune raison de s'opposer à une telle évaluation pour autant qu'ils la considèrent comme partie intégrante

de leur mission à condition qu'ils aient leur mot à dire sur la conception, l'exécution et l'interprétation des résultats.

Mais, répétons-le, ce n'est là qu'une facette du pilotage.

Le micropilotage

Niché dans le système éducatif global, chaque lieu d'éducation possède sa spécificité, sa personnalité, son environnement. Niché dans l'ensemble du corps enseignant, chaque maître est une personne unique, de même que l'élève est unique parmi ses pairs. On retrouve ainsi la célèbre phrase de Pophan:

"La qualité de l'apprentissage que l'on pressent dans une situation d'enseignement donnée est fonction d'une méthode particulière employée par un professeur particulier pour des élèves particuliers poursuivant un but particulier".

Partant de là, V. de Landsheere (1992, p.3) écrit : "Si l'on admet que le principe premier de l'éducation est le respect de la personne, ni les lois psychologiques du développement de l'intelligence et de la personnalité, ni celles de la sociologie, ni la logique interne des branches du savoir ne résistent dans leur généralité dès qu'on franchit le seuil de la classe. Elles aident tout au plus l'éducateur à formuler sa propre loi *hic et nunc*". Reconnaître cette réalité implique-t-il la condamnation sans appel du pilotage macroscopique? Assurément non.

Une complémentarité

Le pilotage microscopique, qui s'opère à l'échelle d'une classe, voire d'un seul élève, n'est pas incompatible avec un projet éducatif global et, moins encore, avec un projet d'établissement. Il s'agit, en réalité, d'un emboîtement de plus en plus fin. S'il n'est pas possible, c'est qu'il existe une défectuosité, une *incohérence* à au moins l'un des échelons du projet éducatif.

La méthode d'évaluation va évidemment différer selon les niveaux, car à mesure que l'on affine l'observation, elle devient de plus

en plus qualitative. Les deux propositions suivantes sont, en effet, très éloignées l'une de l'autre :

- Selon les critères adoptés par l'Association nationale pour l'enseignement de la lecture, seulement 32 % des élèves de 14 ans peuvent être considérés comme de bons lecteurs.
- A 14 ans, Paul n'est capable de lire que de courts textes, porteurs d'informations purement factuelles, faits de phrases simples.

Il est clair que, pour remplir sa mission, l'enseignant a besoin d'informations dont la seconde proposition offre un exemple. Mais il est tout aussi clair que c'est à des évaluations illustrées par la première proposition qu'un ministre de l'éducation va recourir pour prendre une décision relative au programme d'enseignement ou à la formation des maîtres. Lorsque l'OCDE retient 32 indicateurs internationaux de l'enseignement, c'est de préoccupations de ce second d'ordre qu'il tient essentiellement compte.

C'est en gardant à l'esprit les deux approches de réalités à la fois semblables et différentes que la réflexion doit s'engager.

Cohérence, qualité, équité

On peut s'efforcer de contrôler la productivité en savoirs, savoir-faire et savoir-être d'un système éducatif, soit indépendamment des objectifs du programme (on dresse le bilan de tous les acquis identifiables), soit en liaison avec les objectifs principaux que l'enseignement s'est explicitement donné pour mission d'atteindre.

C'est dans cette seconde hypothèse que le pilotage s'indique d'abord. On veut savoir si l'on avance bien dans la direction choisie et, à cette fin, on prélève des indicateurs qui deviendront éventuellement des clignotants si des problèmes particuliers se posent. La répétition périodique des évaluations permet de distinguer des évolutions et des tendances.

Le pilotage devrait établir dans quelle mesure le système éducatif répond à *trois exigences*

: *la cohérence, la qualité et l'équité*.

La cohérence existe:

- si les *objectifs* poursuivis s'inscrivent effectivement, soit dans la ligne du project éducatif global, démocratiquement formulé et adopté (macropilotage), soit dans la ligne de projets particuliers formulés par des groupes distincts, voire par des individus (micropilotage);
- si le *curriculum implanté* - c'est-à-dire, ce qui est effectivement enseigné en classe - correspond aux objectifs fixés;
- si la nature et les modalités des *évaluations* sont fonction de ces mêmes objectifs.

La *qualité* peut être évaluée en elle-même (L'éducation permet-elle un épanouissement optimum de l'individu?) ou de façon comparative (Nos élèves font-ils aussi bien que ceux d'un autre établissement, d'un autre pays?).

Le *critère d'équité* exige notamment que les ressources disponibles soient également accessibles à tous les élèves, ce qui ne signifie nullement qu'ils doivent en tirer parti de la même manière et de la même quantité (*discrimination positive*). Il convient, en particulier, d'établir si la qualité et le niveau des acquis ne sont pas liés davantage à l'établissement fréquenté qu'aux capacités réelles de ceux qui le fréquentent. En démocratie, le système éducatif a pour idéal l'égalité de réussite, étant entendu que les modalités de celle-ci peuvent varier selon les aptitudes, les besoins et les intérêts de chacun.

Bref, bien que des questions appellent des réponses claires et fondées. Qu'apprennent réellement les élèves? Le système éducatif est-il équitable? Les programmes répondent-ils aux exigences du monde d'aujourd'hui et de demain? Les méthodes d'enseignement sont-elles adéquates?

LES INDICATEURS

1. La notion d'indicateurs

En raison de l'usage considérable que le pilotage fait des indicateurs, il importe de

préciser cette notion. V. de Landsheere (1992, p.478) écrit:

"Mesure destinée à servir le pilotage, un indicateur est une statistique directe et valide informant sur l'état et les changements d'ampleur et de nature, au cours du temps, d'un phénomène sociétal jugé important. En éducation, cette mesure informe notamment sur la santé et la qualité du fonctionnement du système, sur ce que connaissent les élèves, ce qu'ils sont capables de faire, et sur l'évolution positive ou négative de ces conditions (d'où l'intérêt à accorder à l'observation de caractéristiques durables) et sur des différences significatives qui peuvent exister entre des aires géographiques ou des institutions à un moment donné."

Dans de bonnes conditions, les indicateurs sont le reflet de la politique éducative et mettent éventuellement sur la voie de modifications à y apporter. Ils doivent être robustes, c'est-à-dire ne pas être trop sensibles à des fluctuations accidentelles. Il faut donc qu'ils se rapportent à des caractéristiques du système éducatif qui s'y manifestent de façon générale et durable. Si leur signification est facilement comprise par tous les membres de la communauté éducative, le dialogue entre les politiques, les citoyens et les enseignants est facilité".

Un indicateur est un clignotant dont il faut rechercher les causes. Il sert à attirer l'attention et invite à l'action (pilotage). On peut aussi dire qu'un indicateur est un instrument de communication.

Toute statistique relative à l'éducation n'a pas valeur d'indicateur. Ainsi, connaître le nombre d'écoles que compte une région n'apprend rien sur la qualité de ce qui s'y fait. Un tel chiffre n'acquiert une signification que si un point de référence permet de l'interpréter: évolution d'une même statistique, comparaison avec des mesures similaires opérées ailleurs, norme définie par la société.

Concevoir des indicateurs est donc une opération où interviennent des considérations philosophiques (jugements de valeur), politiques et techniques. On attend qu'ils soient importants, valides, faciles à prélever, crédibles, et mettent sur la voie des décisions

correctives à prendre.

"Piloter, c'est plus qu'accumuler des indicateurs. Le pilotage a trois composantes nécessaires:

- la collecte régulière d'informations,
- l'évaluation de ces informations et,
- surtout, la traduction en actions institutionnelles ou en sanctions,

c'est-à-dire en approbations ou désapprobations" (J.Oakes, 1988, p.496). Par exemple, on conclura que tel objectif a été ou non atteint de façon satisfaisante.

Problèmes généraux

Des problèmes souvent difficiles se posent à propos des indicateurs, notamment:

- La difficulté d'un accord sur les buts de l'éducation et sur les objectifs à atteindre n'est pas aisée.
- L'utilisation inappropriée des données.
- Limiter les mesures aux connaissances et aux habiletés cognitives laisse dans l'ombre d'autres effets possibles de l'éducation, tant pour les individus que pour la société.
- Les indicateurs sont des statistiques. Or il est plus facile de chiffrer la quantité que la qualité. Il importe de toujours se demander si les indicateurs de rendement scolaire reflètent ce que les élèves connaissent réellement ou sont effectivement capables de faire.
- Il est injuste de juger les enseignants à travers les résultats observés, sans tenir compte des conditions et des facteurs environnementaux. Ils peuvent varier considérablement selon les régions, les quartiers d'une ville,...
- La publication d'indicateurs a une signification politique et il n'est pas rare que des pressions visant à orienter les choix ou la présentation des résultats se manifestent.
- Plus une politique ou un programme d'éducation sont imprécis, plus il est difficile de choisir des indicateurs représentatifs.

- Les informations doivent être publiées le plus rapidement possible, car il importe de pouvoir réagir vite en cas de problèmes graves; de surcroît, à mesure que le temps passe, la signification d'un indicateur peut changer.

- Même conçus et collectés avec soin, les indicateurs n'apportent pas des informations d'une signification évidente. Celle-ci varie selon les valeurs auxquelles on adhère et aussi selon les options pédagogiques. Les attentes vis-à-vis du système éducatif d'ailleurs selon les groupes: élèves, enseignants, familles, entreprises, autorités religieuses,...

Exemples de réalisations

I. INDICATEURS NATIONAUX

Certains pays comme les Etats-Unis, l'Angleterre, la France ont, dès maintenant, mis en place un pilotage du système scolaire très développé et en publient périodiquement les conclusions. Ils sont notamment suivis par le Canada, la Suède, la Danemark, l'Australie, la Nouvelle-Zélande, le Japon. Deux exemples sont retenus ici: celui de l'Angleterre, parce qu'il représente l'aboutissement d'une grande expérience en la matière et celui de la France où l'on avance à pas de géants. Des enseignements importants pour notre Communauté peuvent être tirés de ces réalisations.

II. INDICATEURS INTERNATIONAUX

Des études internationales et interculturelles des rendements scolaires peuvent produire des données qui constituent des indicateurs de la mesure où les nations réussissent à éduquer les individus et à les préparer à jouer leur rôle dans le monde du travail. Comme le soulignent N. Bottani et H. Walberg (1992, p.9), le but n'est pas de classer les pays entre eux, mais bien de fournir aux décideurs politiques une compréhension plus profonde des facteurs qui influencent la qualité de l'éducation, et de leur permettre d'explorer une gamme plus large d'options politiques.

I. Les enquêtes de l'IEA

En matière d'études internationales comparatives des rendements scolaires, la Belgique a fait œuvre de pionnier en participant, dès sa création, à la fin des années 50, aux enquêtes de l'Association Internationale pour l'Evaluation du Rendement Scolaire (IEA).

Née à l'initiative d'une douzaine de spécialistes de la recherche expérimentale en éducation, l'IEA est aujourd'hui, avec quelque soixante pays membres, une organisation mondiale de recherche évaluative. Depuis 1961, l'IEA lance une nouvelle évaluation à peu près tous les trois ans, de façon à décrire un cycle couvrant les disciplines principales tous les douze ans. L'intérêt de ces données comparatives pour le *macropilotage* est capital

II. Le projet "Indicateurs internationaux de l'enseignement" (INES) de l'OCDE

En 1986, le *Centre pour l'innovation et la recherche en éducation* (CERI) de l'OCDE a lancé un vaste projet coopératif de mise au point et de prélèvement périodique d'indicateurs internationaux de l'enseignement. En particulier, ils devraient informer sur l'efficacité de l'éducation et aider à définir et à adapter les politiques éducatives dans les pays membres. L'idéal est évidemment d'établir des liens entre l'ensemble des indicateurs internationaux et les systèmes d'indicateurs nationaux, en prélevant des indicateurs similaires dans le deux ensembles.

Que l'OCDE se soit engagée dans le projet INES est significatif de la liaison de plus en plus étroite qui existe entre éducation et économie.

L'idée de départ du projet INES était de développer des indicateurs dans trois domaines: **les résultats, les ressources et les contextes**. Après de nombreuses études théoriques et des négociations entre Etats participants, les indicateurs suivants ont été retenus:

1/ Coûts, ressources et processus scolaires:

- Dépenses d'éducation: répartition, dépenses par élève, etc.

- Personnel employé dans l'enseignement, taux d'encadrement.
- Caractéristiques des prises de décisions.

2/ Contexte démographique, économique et social.

3/ Résultats de l'enseignement: taux de réussite, rendement scolaire, intégration des jeunes au marché du travail.

Quatre réseaux internationaux jouent un rôle crucial dans ce projet:

- Réseau A: Acquis des élèves.
- Réseau B: Education et insertion sur le marché du travail.
- Réseau C: Caractéristiques des établissements et des systèmes d'enseignement.
- Réseau D: Attitudes et attentes.

Ce project continue à voluer.

J. Magy (1992, p.10) estime avec raison que ces indicateurs "sont appelés à être la toile de fond permanente des analyses fondamentales des politiques nationales d'éducation".

Il importe, par ailleurs, de souligner l'effet stimulant de ce projet sur le développement des services de statistiques et des systèmes de pilotage dans les pays qui ne s'en étaient pas encore (suffisamment) dotés.

La Conclusion 3 de l'Assemblée générale des pays participants au projet, qui s'est tenue à Lugano en 1992, est la suivante: "Comme les indicateurs (internationaux) ne sont pas très élaborés, ils devront être complétés et pondérés par des données supplémentaires. Pour analyser les informations qu'ils fournissent et en tirer des conclusions, il est notamment essentiel de prendre en compte les contextes nationaux, c'est-à-dire notamment: les structures gouvernementales et les contextes dans lesquels s'élaborent les décisions en matière d'enseignement (importance de la décentralisation, de l'autonomie des établissements scolaires pour les décisions clés...), les différences de conditions économiques et de ressources allouées à l'enseignement (illustrées par la part de l'enseignement dans le PNB...), les différences de structures de la société (degré

d'homogénéité, pourcentage de groupes minoritaires...), les différences des principales statistiques socio-économiques (démographie, tendances de la population...), ainsi que certains composantes relatives, entre autres, à la culture, aux valeurs, à l'histoire, qui contribueront à façonner le cadre particulier dans lequel s'effectuent les prises de décisions et la mise en oeuvre des politiques en matière d'enseignement. (...) Il s'ensuit que, dans la mesure du possible, d'autres sources devraient être utilisées pour confirmer, corriger ou mieux comprendre les informations fournies par les indicateurs." C'est parler d'or. Cette nécessité d'éclairer la signification des indicateurs est répétée sous un autre angle dans la Conclusion 17: "Il est certain que les indicateurs de l'enseignement peuvent largement bénéficier d'une confrontation avec les indicateurs des secteurs des sciences, de la technologie et de l'économie."

Le micropilotage

Les considérations qui précèdent concernent le pilotage à grande échelle: niveaux national et régional. Toutefois, on peut travailler aussi à petite échelle. Ainsi, une commune, un établissement qui ont formulé un projet éducatif, et donc des objectifs particuliers, peuvent aussi estimer dans quelle mesure les intentions se réalisent.

L'autopilotage devrait être spécialement encouragé au niveau des établissements.

En ce qui concerne l'évaluation des performances, les services nationaux ou communautaires peuvent mettre les instruments construits par les spécialistes à la disposition de ceux qui veulent s'en servir localement, et éventuellement les aider à traiter les données.

Comme ce sont principalement les améliorations possibles qui intéressent les éducateurs, ce sont surtout sur les variables de processus qui doivent retenir l'attention.

Le micropilotage procède d'une attitude générale, d'une philosophie de l'action quotidienne: ne pas se contenter de belles intentions, mais toujours s'obliger à vérifier, aussi objectivement et systématiquement que

possible, si elles ont vraiment été suivies de l'effet souhaité ou souhaitable, et dans quelle mesure. En fait, c'est une nouvelle "culture d'établissement" qui doit se développer.

L'une des conditions du succès de l'autopilotage réside dans la préparation des enseignants à cette nouvelle mission.

Bref, par rapport au macropilotage, le micropilotage permet de concentrer beaucoup plus l'attention sur les aspects qualitatifs, contextuels. Il ne procède pas de l'audit, mais se veut essentiellement une analyse, une réflexion sereine - ce qui n'empêche pas la rigueur - sur ce qui se passe et s'est passé dans l'école.

Réalisé dans un esprit démocratique, le micropilotage insiste beaucoup moins sur les carences que sur les façons de mieux faire.

LE POUR ET LE CONTRE

Les bénéfices escomptés

Ils sont de cinq ordres:

- Une meilleure rationalité politique.
- Une action éducative généralement plus efficace.
- Une plus grande équité. Pour l'assurer efficacement, il faut, effet, commencer par débusquer les inégalités, puis les combattre tout en assurant le respect des différences.
- Une information démocratique de tous les membres de la communauté éducative.
- Un développement de la recherche évaluative en éducation.

Des informations précieuses pour la pratique de l'enseignement.

Analysant les effets secondaires bénéfiques du pilotage pratiqué par l'*Assessment of Performance Unit* en Angleterre, Gipps (1989) signale, en particulier, que la période (souvent plusieurs années) qui s'écoule entre

deux évaluations peut être utilisée pour creuser les résultats. En particulier, l'analyse des erreurs apporte de précieuses informations aux enseignants. Et Gipps conclut: "Il est ironique que l'évaluation nationale, qui a été accueillie avec beaucoup de réserves par les enseignants, s'est avérée pour eux une précieuse source de feedback."

Une rupture d'isolement

Dans l'étude où il situe la problématique des indicateurs et du pilotage dans le contexte de la politique de l'éducation de la Communauté française de Belgique, J. Magy (1992, pp.152-153) s'attache à un aspect généralement négligé. Il relève avec raison qu'à bien des égards, les parents, les élèves, les éducateurs et les cadres pédagogiques sont largement abandonnés à eux-mêmes lorsqu'ils doivent prendre des décisions d'importance majeure. Ils sont, en effet, loin de toujours disposer d'informations suffisantes pour éclairer leur choix.

Schématiquement, J. Magy évoque les cas suivants:

- Parents et élèves devant choisir une école sans être informés des qualités réelles des divers établissements.
- Chefs d'établissement peu ou suffisamment informés des performances et d'autres caractéristiques pédagogiques et managériales des autres établissements.
- Pouvoirs organisateurs et inspecteurs manquant de données de référence à propos d'ensembles d'établissements ou à propos de ce qui se passe effectivement dans d'autres systèmes éducatifs.
- Enseignants et formateurs manquant d'outils de référence pour définir des objectifs et des niveaux de maîtrise, et mal informés à propos des instruments d'évaluation existants et de la manière de les utiliser adéquatement, etc. La signification des outils de référence est claire: ils peuvent contribuer au progrès de la "professionnalité" des maîtres et par là au progrès de l'éducation même.

D'évidence, si les diverses formes de pilotage étaient appliquées en se basant - notamment - sur des ensembles d'indicateurs significatifs, collectés de façon experte avec la collaboration de tous les membres de la communauté éducative, en particulier les enseignants et les cadres pédagogiques et administratifs, on serait en droit d'espérer non seulement une augmentation directe de la productivité (au sens noble de ce terme) du système éducatif, mais aussi, de façon indirecte, une augmentation importante de la qualification des acteurs.

Les dangers

Même s'il semble pleinement justifié de vérifier dans quelle mesure les objectifs assignés à l'éducation sont atteints (et cette évidence est plus grande encore si la communauté éducative, à commencer par les enseignants, a participé à ce choix), il n'en reste pas moins que cette vérification est ressentie par beaucoup de professeurs comme une menace. Ne va-t-on pas les rendre seuls responsables d'insuffisances observées, des sanctions ne risquent-elles pas d'être prises à leur encontre (comme cela se voit aux Etats-Unis) ? Ces questions sont redoutables. N'intente-t-on pas des procès en réparation contre d'autres membres de professions intellectuelles (y compris les médecins) qui ont nui à leurs clients ? Pourquoi les enseignants jouiraient-ils d'une immunité ? Aucune raison ne justifie cette exception, à condition que l'éventuelle faute professionnelle grave puisse être prouvée de façon indiscutable. Ce sera rarement le cas, tant les responsabilités d'un échec scolaire - a fortiori d'une simple insuffisance de rendement - sont partagées.

Il semble de loin préférable d'adopter une attitude positive en optant toujours pour une évaluation formative : les informations fournies par les indicateurs devraient essentiellement servir à mettre sur le chemin d'améliorations à tous les échelons : politique éducative, amendement des programmes, perfectionnement de la didactique, aide aux élèves en difficultés, incitations à la coopération des parents, ...

Cela étant dit, l'idée de départ reste valide :

oui, il faut vérifier si les objectifs choisis sont bien atteints.

Il importe aussi tenir compte de déformations plus spécifiques dont Madaus (1988) a dressé un inventaire :

- Si les élèves, les enseignants et les cadres pédagogiques croient, même erronément, que les aspects touchés par les indicateurs sont importants, ils leur accorderont de l'importance. En particulier, si les maîtres pensent que d'importantes décisions dépendent des résultats aux tests de rendement, ils insisteront, dans leur enseignement, sur les matières sur lesquelles les épreuves portent.

- A mesure que l'on connaît les matières sur lesquelles les tests portent et la façon dont les acquis à leur propos sont évalués, les programmes enseignés dans les classes se modifient en conséquence. Cette modification n'est pas nécessairement blâmable : certains responsables de l'enseignement ont vu dans ce phénomène un moyen d'amener les enseignants à concentrer leurs efforts sur des objectifs particulièrement importants.

- Les maîtres sont très attentifs à la façon dont leurs élèves sont interrogés (réponses ouvertes, QCM, tests portant plus sur les savoirs que sur les savoir-faire,...) et adaptent leur enseignement pour préparer les élèves à faire face à ces exigences, même s'ils désapprouvent celles-ci.

- On risque de considérer les indicateurs comme d'inafiables informations sur ce que produit l'école.

Une constatation doit cependant dominer toutes les autres : un enseignant n'adhère vraiment à une idée que s'il l'a faite sienne; l'imposer artificiellement ne sert pas à grand-chose.

A condition de s'en servir ...

Dans leur audit du système d'enseignement

belge, demandé à l'OCDE, R. Haby, R. in't Veld et J. Tschoumy écrivent (1993, pp. 96-97) : "Il ne suffit pas d'avoir un minimum d'instruments à sa disposition. Encore faut-il que se développe, parmi les divers acteurs concernés, un état d'esprit favorable à la circulation des données, à des échanges sur leur signification et leur éventuelle utilisation."

En effet, répétons-le encore, le pilotage n'existe que si les conclusions qui se dégagent des observations débouchent sur des décisions et des actions.

Références

BOTTANI, N. et WALBERG, H., *L'OCDE et les indicateurs internationaux de l'enseignement, Un cadre d'analyse*, Paris, OCDE, 1992.

de LANDSHEERE, G., *Le pilotage des systèmes d'éducation*, Bruxelles, De Boeck, 1994.

de LANDSHEERE, V., *L'éducation et la formation. Science et pratique*, Paris, PUF, 1992.

DUPONT, P. et al., *A livre ouvert...dans la gestion de l'école*, Bruxelles, Ministère de l'Education, 1988.

GIPPS, C., *National Assessment and School Education in the U.K.*, Communication à la Conférence annuelle de l'AERA, San Francisco, 1989.

GONOD, F., Problématique de la maîtrise sociale des technologies, *Analyse des systèmes*, 1990, 16, 3, 3-43.

HABY, R. et al., *Examen des politiques nationales d'éducation - Belgique*, Paris, OCDE-CERI, 1993.

MADAUS, G.F., The influence of testing on the curriculum. In L. TANNER, Ed., *Critical issues in curriculum*, Chicago, University of Chicago Press, 1988.

MAGY, J. *L'enseignement et la formation en Communauté française de Belgique. Produire et gérer la qualité*, Bruxelles, CEPESS, 1992.

OAKES, J., *Educational Indicators: a guide for policy makers*, New Brunswick, N.J., Center for Policy Research in Education, Rutgers University, 1986.

WORKING GROUP SESSIONS

SUMMARIES

WORKING GROUP SESSION I¹

SUMMARY

Anne West

1. What are indicators and regional indicators for? What aims do they have? What methodologies should be used?

Indicators...

- provide information about the quality of education and about administrative systems and policies
- describe the current situation and facilitate educational comparisons
- help decision-making and management at different levels - class, school, local authorities, regional, national, international - which can effect major changes in the education system
- enable discussion about objective data, adding transparency to the education debate
- can lead to improved education for students and to improvements that can be embedded in the educational system
- can answer the question of school quality and system quality
- standardize the language used and allow all countries to agree on a meaning

However, it must be emphasized that indicators are not valid if the information base is not reliable.

Indicators at different levels

All indicators cannot be included at all levels of responsibility - international, national,

regional, local, etc.; some indicators, it was felt, cannot be given for all areas (e.g. finance).

However, common indicators are needed at different levels to enable comparisons to be made. There should be a core set of indicators for the national and international levels (for example, insertion into the labour market). At the regional level there can be complementary indicators (such as bilingualism in Catalonia). As a tool, indicators serve different purposes. At a lower level (like the school), they can be used to improve practice.

Indicators concerned with the state of the system must be distinguished from those concerned with the evaluation of a specific policy or an innovation.

Regional indicators

Given the growing importance of the regions within the European Union, it is vital to have such indicators. Indicators at the regional level show disparity and diversity between regions; they can be used to even out inequalities between regions which differ socially, economically and culturally.

Contextual information must be given for regional indicators to enable them to be interpreted. Significant inter-regional indicators need to be agreed upon.

It seems to be important to choose one of the three standard classifications of the regions according to Eurostat; the appropriate "NUTS" level should be chosen.

In relation to regional data and/or national data, caution must be taken when data without the same reliability are compared.

¹The questions for discussion for this Working Session were proposed by Pierre Mondon.

It is important that there is appropriate expertise at the regional level. The cost implications for regions should be borne in mind.

It is worth noting that some statistics on education can be disaggregated by regions at present.

Finally, should the conception of Europe be a Europe of regions or a Europe of states? Should the principle of subsidiarity apply?

2. What attitudes do the different people involved have towards evaluation? Is the usefulness of evaluation recognised? What problems are there?

If evaluation is used for control, attitudes will be negative. If used for diagnosis and improvement, attitudes will be positive. Evaluation will be undermined if it is used primarily for ranking and competition. There needs to be an evaluation culture in institutions.

Experience from other countries shows that teachers can benefit from using information gained from indicators in establishing a baseline (for example in attainment standards).

The differences between inspection and evaluation need to be made clear so that teachers do not find the use of indicators threatening.

Practitioners are more likely to be involved in monitoring and evaluation (as well as in data collection for indicators) if these activities are organised at a regional level than at a national level.

3. What areas of research and what methodologies (i.e. qualitative versus quantitative) are most widely used?

Qualitative versus quantitative

The following points were made:

- At the macro-level, quantitative indicators are most appropriate. Contextual information needs to be

provided, and social indicators could also be presented alongside educational indicators.

- At a micro-level, there can be an increase in qualitative methods, although these require standardisation. Self - evaluation is also valuable.
- There needs to be a distinction between regular monitoring and programme evaluation.

Methodologies most widely used

- Surveys - These should be regionally representative.)
- Questionnaires - These can be used to measure attitudes and expectations. Problems can arise with translations.
- Time series data
- Administrative data

There needs to be a co-ordination of methodologies. It is important for all countries to use the same methodologies for a given indicator. There needs to be standardisation between countries or there will be difficulties with interpretation. Administrative data need to be accurate.

4. How is evaluation being carried out at a regional level?

At a regional level, efforts should be made to promote self-evaluation and formative evaluation, and to involve all involved - teachers, pupils, families, institutions.

Various forms of evaluation are proposed in some regions (e.g. internal, external, self).

In a number of countries there do not appear to be evaluations of the education system as a whole carried out at a regional level, although data of various types can be disaggregated to a local level. Cases of micro-evaluations were noted.

The following model was proposed for regional indicators:

- a. Determination of indicators by means of democratic debate, leading to...
- b. formulation of the indicators (by specialists), leading to...
- c. publication, on the one hand, and use, on the other.

General

The view was expressed that people needed to start working with indicators. These need to be published so that information is available.

Mistakes will be made, but can be corrected the following year, so that there is a gradual up-grading of quality. This is what has happened with the INES project.

The publication of indicators will ensure that those who have not provided data will do so in future years. It will also ensure that data quality improves, as neither regions nor countries want incorrect data to be published.

WORKING GROUP SESSION II¹

SUMMARY

Carme Vidal

- 1. What type of indicators would be most useful to the regions?**
- 2. How do the regions' purposes in the use of indicators compare to those at other levels, and how can they be coordinated with them?**
- 3. How can data be collected so that it corresponds to different needs at different levels without conflicts?**

The various Working Groups, in keeping with the philosophy of the seminar, responded to the first question by pointing out that indicators should be related to the context of education and give basic, general information about the region: the demographic, social, economic and other contexts.

The groups also agreed on the importance of process:

- School calendars
- Hours of instruction
- Analysis of teaching methods
- Etc.

The school culture should also be taken into account.

A point on which there was less agreement than those previously mentioned is the difficulty of making indicators on costs and other inputs, such as human and material resources.

It was suggested that paying too much attention to these factors may bring the risk of overlooking the importance of process. By the same token, an emphasis on results or achievement outputs can also mean a loss of importance for process. It was felt that

cross-curricular skills, values and ethics should be stressed more than the subjects.

However, care needs to be taken to respect the individuality of each human being; one should never define what this should consist of. This implies maintaining a difficult equilibrium, which should lean towards the Little Prince and avoid Orwell's 1984.

It is also important to make sure that indicators do not have too great an influence on such a complicated process as education. We should be aware that evaluations affect what society values and what schools do. This effect can be positive or negative.

For the external efficiency of the system, it was considered important to pursue the following goals:

- professional placement
- transition from the school to active life
- recognition of diplomas across borders

On a regional level, the following points were also stressed:

¹The questions for discussion in the Working Groups were provided by Eugene Owen.

- minority groups
- linguistic groups
- illiteracy

With variables on these points, internal disparities can be analysed, problems can be diagnosed, and comparisons between regions can be made.

A balance of actions will be determined by the level of responsibility or decision-making power held by the region and the schools. At least two indicators, therefore, should be made showing the **level of decision-making power** - the **responsibilities** held by the region and the extent of **autonomy** of the schools.

While it was believed that indicators reflect our concerns and synthesize information for us, it was also felt that this information must be **adapted according to the public** - teachers, parents or political decision-makers, as the same information does not have the same meaning for the different actors.

Everyone agreed that it was easier to use quantitative indicators than qualitative ones. Qualitative methods lead to problems of interpretation and are costly. This does not mean, however, that they should be abandoned. They are particularly suitable for taking micro-decisions at the school level.

The answer to the second question above, regarding comparing and coordinating regional objectives with other levels, was

very brief and practically unanimous: it was considered important to reach a consensus between the state and the regions, and the idea expressed so wonderfully by Mr Owen in his conference was seconded: **Collaboration, collaboration and collaboration!**

Each level has to know and respect the role of the other levels, and cooperate with those on the same level.

Policies and decision-making should be clarified with objective information to show other levels what one is doing. The idea of transparency arose again and again.

Concerning methodological aspects, such as defining variables and selecting samples, it was felt that there has to be agreement between the regions and the schools. The instruments to be used must be adapted and made compatible with the context as much as possible.

This collaboration, coordination - and also motivation - are the answers to the question of how data can be collected that corresponds to the needs of the different levels without conflicts.

Finally, we need to unify the vocabulary we use, gather forces and look for capable people for this.

GROUPES DE TRAVAIL 3ème SEANCE¹

Alain Michel

1. Quel est le rapport entre le macro et le micro-pilotage? Il faut considérer les questions de niveau, le rôle de prendre des décisions, la publicité.

Le rapport entre micro et macro-pilotage est différent selon le degré de décentralisation de chaque groupe.

Le niveau national est niveau macro, le niveau de l'établissement scolaire est un niveau micro, le niveau de la région est à la fois macro et micro : on pourrait l'appeler niveau "mezzo". Cela dit, dans un système relativement décentralisé, le niveau régional est surtout macro. Les décisions qui relèvent du macro-pilotage sont celles qui concernent la planification stratégique : définition des grands objectifs éducatifs de la région, notamment en termes de niveau, de type et de contenu de formation y compris les objectifs concernant des catégories spécifiques d'élèves : élèves défavorisés, élèves handicapés, réduction des discriminations de toutes sortes, etc.

Le macro-pilotage inclut aussi l'analyse générale des besoins futurs de formation à partir d'une analyse de l'évolution des activités économiques régionales (schémas provisionnels).

Il inclut aussi la prise en compte des autres objectifs fondamentaux :

- épanouissement individuel des élèves
- transmission d'une culture
- formation à la citoyenneté

Il inclut aussi l'élaboration de la carte scolaire régionale.

D'autres aspects sont :

- la répartition des ressources au niveau intra-régional

- la formation permanente des enseignants

Le macro-pilotage concerne divers niveaux de responsabilité :

- les collectivités territoriales intermédiaires (ex. : le "territoire", le district, la commune, etc.)
- l'établissement scolaire: la nature du micro-pilotage dépend du degré d'autonomie de l'établissement scolaire. Celui-ci diffère en général selon le niveau d'enseignement (primaire, secondaire, supérieur).

En général pour l'établissement secondaire le micro-pilotage concerne :

- l'adaptation des programmes (curriculum)
- l'élaboration du projet d'établissement
- le choix de l'organisation et des méthodes pédagogiques

Les relations macro-micro-pilotage

La création d'indicateurs pour améliorer le pilotage aux différents niveaux de décision et les partenaires sociaux concernés.

Recommandation importante Il faut établir une nomenclature commune pour les informations et les données aux différents niveaux de décision :

- afin d'agréger ou désagréger les données
- afin de pouvoir comparer des régions et des établissements

¹Les questions pour la discussion dans les groupes de travail ont été proposées par Gilbert de Landsheere.

2. Si l'évaluation doit être d'autant plus indépendante qu'influente, faudrait-il qu'elle soit interne ou externe?

Il y a une complémentarité entre l'évolution interne et externe : les deux sont nécessaires.

Une évaluation interne seule n'est pas suffisante et ne présente pas toutes les garanties d'objectivité et d'indépendance nécessaires.

Une évaluation externe seule est rarement opérationnelle et intégrée par les acteurs concernés.

Il faut distinguer au niveau région et au niveau école :

1. La région

l'évaluation externe implique une évaluation politique : état central et parlement régional

3. A quelle sorte de service on devrait confier le pilotage ?

1. La région

- évaluation interne :

- cellule administrative d'évaluation (évaluation plus quantitative)

- corps d'inspection (évaluation plus qualitative)

- évaluation externe :

- état/administration centrale

- parlement régional

- université ou organismes /bureaux d'étude

2. L'école

L'évaluation externe implique une évaluation par des corps d'inspection ou des organismes d'audit, ou une publication d'indicateurs avec débat public.

L'évaluation interne est une auto-évaluation : elle est souhaitable mais difficile à mettre en oeuvre (requiert une formation adéquate des acteurs concernés)

2. L'école

- évaluation interne : auto-evaluation (indicateurs)

- évaluation externe : corps d'inspection et audit par des consultants externes

4. Transparence et diffusion - combien de responsabilité et quelle sorte de responsabilité est-il convenable, et quelles sont les problèmes qui puissent s'avérer?

La transparence est nécessaire (*accountability*) mais la publicité des résultats des évaluations requiert de la prudence : risques de mauvaises interprétations et de

conflits avec les enseignants.

Il faut une véritable stratégie de communication.

5. Quelles sont les perspectives de la recherche évaluative dans le futur ? (Il faut considérer le modèle interactif.)

La question fondamentale est celle du développement d'une culture de l'évaluation. Il faut concevoir des processus démocratiques de participation des divers acteurs du système éducatif à l'élaboration des diverses évaluations (globales, des politiques, des écoles, des élèves, etc.) qui doivent être conçues de manière systémique, c'est à dire

dans leur relation interactive.

Il faut aussi définir la meilleure complémentarité possible entre évaluation diagnostique, formative, et sommative, mais aussi entre évaluation des processus et des résultats.

6. Quelles sont les perspectives des indicateurs régionaux dans le futur?

- Des indicateurs régionaux sont d'autant plus indispensables que les régions ont davantage d'autonomie.
- Tous les indicateurs nationaux peuvent être "désagrégés" au niveau des régions, avec une utilité certaine.
- Les indicateurs spécifiques peuvent être élaborés au niveau des régions.

Les priorités :

- indicateurs de processus
- indicateurs relatifs à l'insertion des élèves sur le marché de l'emploi

- indicateurs relatifs à des priorités politiques spécifiques à la région : Ex. pour la Catalogne - enseignement du catalan, de l'histoire de la Catalogne...

- Dans une perspective européenne :

- l'ouverture sur l'Europe. Par exemple : indicateurs sur l'apprentissage des langues européennes et sur les acquis des élèves en langues.
- niveau des diplômes et sortie des élèves sans diplôme
- indicateurs d'insertion sur le marché du travail.

DISCOURS DE SYNTHESE

Pierre Mondon

Pierre Mondon est né en 1941 à Grenoble

Formation - Ecole polytechnique; Ecole nationale de la statistique et de l'administration économique (ENSAE)

1967-1971 - INSEE - informaticien

1971-1973 - INSEE - Responsable de la Formation des informaticiens

1973-1981 - Ministère de l'Education Nationale : Responsable de la sous-direction des statistiques et des sondages au sein du SPRESE

1981-1987 - Ministère de l'Education Nationale : Directeur du service de la prévision, de l'évaluation et des statistiques (SPRESE)

1988-1992 - Directeur de l'Office National d'Information sur les Enseignements et les Professions (ONISEP).

Rassurez-vous, d'abord, je ne vais pas faire une synthèse des trois synthèses des synthèses des "n" réunions. J'en serais d'abord bien incapable, et ça ne vous apporterait rien. Et je crois qu'au contraire, les trois rapports qui ont été faits se suffisent à eux-mêmes. Je veux donc plutôt essayer de souligner, d'attirer l'attention sur certains points qui ont été cités ou peut-être moins cités et qui me paraissent à moi tout particulièrement importants. C'est autant des remarques personnelles parce que j'ai écouté les conférences et participé à vos groupes de travail, que quelque chose qui marque l'intérêt de l'Union européenne et de la Commission pour vos travaux.

J'ai entendu dans les trois rapports bien sûr quelques redites, vous avez repéré dans les groupes de travail qu'il y avait aussi un certain nombre de redites dans les questions auxquelles vous aviez à répondre. C'était quelquefois avec des mots un peu différents mais un peu les mêmes questions. Je crois que ce n'est pas à des pédagogues que je rappellerai que la répétition est la base de la pédagogie et que c'est bien volontairement que, pour vous centrer sur ces points, nous avons traité de questions analogues. Par

contre, et là, je me tourne vers les organisateurs, je dirais que ce qui était nécessaire en termes d'outils de travail ne doit pas obligatoirement être retracé dans le rapport final et peut-être faudra-t-il que ce rapport ne reprenne pas les questions après chaque conférence mais soit organisé un peu différemment, en tout cas je me permets de suggérer ce point.

Vous aviez dit, en ouvrant ce séminaire lundi matin, que cela vous paraissait bien ambitieux. Alors, si nous avions fait une mauvaise interprétation des objectifs du séminaire, nous pourrions croire que nous ne les avons pas atteints. Si par exemple votre idée était de repartir avec une liste d'indicateurs dans votre poche que demain vous pourriez faire calculer par vos collaborateurs, c'est raté. Mais j'espère bien que vous n'aviez pas cet objectif et je rappellerais juste ce que disait Eugene Owen, ne pensons pas que demain, en une nuit, tous les indicateurs vont être élaborés et calculés. Par contre, je crois que pour ce qui est des objectifs réels, on les a atteints, voire dépassés, malgré peut-être certaines difficultés dont les groupes se sont fait l'écho, difficultés en termes de langage (nous

avons parfois un peu de peine à échanger ensemble), mais je noterais que si au niveau des langues nous avons quelques difficultés, au niveau du langage propre à chacune de nos spécialités : chercheurs, statisticiens, administrateurs, pour une première rencontre, je trouve que nous avons pu bien échanger. Et ce n'est pas évident parce que nous avons nos préoccupations et nous avons notre langue propre. Et malgré ces difficultés, nous avons pu entamer ce dialogue, qui parfois était difficile. Est-ce qu'il aurait mieux valu qu'on fasse des groupes plus homogènes, en mettant d'un côté les administrateurs et de l'autre côté, les statisticiens et les chercheurs ? Je crois que là, ça aurait été une erreur complète que de céder à cette facilité. Il faut, ainsi que cela a été dit, échanger, négocier, même si on n'était pas encore au niveau de la négociation. Il faut bien que, pour qu'on puisse aboutir à des indicateurs, ce travail-là se produise entre les administrateurs, les statisticiens, les chercheurs, même si au départ il est un peu difficile. Mais je peux vous dire que moi, j'ai observé qu'entre la première matinée, un peu dure, et la journée d'hier où on voulait toujours en dire plus, on voulait toujours parler malgré quelquefois l'heure tardive, j'ai bien vu déjà une évolution en très peu de jours et je crois que c'est de bon augure pour les autres réunions.

Parfois nous avons collectivement été un peu naïfs. J'ai entendu, y compris dans les rapports, beaucoup de "il faut, il faut faire ceci, il faut faire cela...". Moi, je n'appelle pas ça de la naïveté (chacun peut penser ce qu'il veut), je considère qu'il faut parfois un peu rêver, on pourrait appeler ça plus noblement "faire un peu de brainstorming", c'est beaucoup mieux que le rêve bien sûr, quitte à tout à fait savoir qu'après avoir ouvert l'horizon, après avoir découvert un monde vaste, il faudra s'atteler à choisir ce qui est le plus important, à chiffrer les coûts (on n'en a pas beaucoup parlé non plus et on sait que ça coûte). Je crois que c'est bien d'avoir commencé ainsi que nous l'avons fait même si après nous devrons revenir les pieds dans la glaise et remonter nos manches.

Je vais, après ces remarques, dire d'abord quelques points importants sur les objectifs et les contenus, insister deuxièmement sur les conditions générales pour que tout cela

puisse fonctionner, et troisièmement quelques perspectives d'avenir.

Première observation qu'on peut faire, c'est que personne ne s'est élevé contre les indicateurs. S'il n'y avait que des statisticiens et des chercheurs, c'était gagné d'avance, ils aiment ça, ça leur fait du travail intéressant... donc c'est bien. Mais il n'y avait heureusement pas que des statisticiens et des chercheurs, il y avait aussi des administrateurs, et eux qui savent peut-être mieux que ça va coûter, que cela va leur faire du travail, ils auraient pu dire nous on se débrouille... Mais non, je n'ai jamais entendu "on peut bien s'en passer" et il faut le noter : il y a une demande très forte pour ces indicateurs. Probablement parce que tout le monde a un peu conscience de ce que vient de rappeler Alain Michel, qu'on ne gère plus comme auparavant et qu'on a maintenant beaucoup plus besoin d'indicateurs.

On a parlé de "Pilotage" et "accountability". Ces deux mots qui sont respectivement difficiles à traduire, l'un étant un mot français pas tellement traduisible en anglais, et l'autre au contraire qui est un mot anglais difficilement traduisible en français, représentent pour moi les génies de deux pays. Je crois qu'on a à penser effectivement à ce qu'est ce concept de pilotage et à bien le comprendre par rapport à des pratiques administratives, à des pratiques de démocratie, en particulier en France et en Angleterre puisque c'est à ces deux pays que je pense, mais que ça va nous inspirer tout à fait pour les indicateurs dans le domaine de l'éducation. Au niveau du pilotage, on l'a tous dit, mais comme ce n'est pas du tout malheureusement encore une réalité, ça vaut le coup de le rappeler, si on veut introduire quelque élément rationnel, c'est parce que trop souvent encore aujourd'hui, les décideurs, soit ne disposent pas de ces éléments, soit dans certains cas, s'appuient sur des éléments plus affectifs ; quelqu'un disait même qu'un ministre décide en fonction de ce que lui dit son fils ou sa fille sur ce qui se passe à l'école, et les gestionnaires aussi, nous le savons tous, ont parfois certaines affinités plus avec un établissement qu'un autre et il peut se passer que la répartition des moyens ne soit pas toujours parfaitement transparente. Donc là, il faut vraiment bien redire toute

l'importance de cette introduction d'éléments rationnels.

Deuxième observation : une insistence par rapport à tous les indicateurs descriptifs de l'état d'un système, une insistence au niveau de la région, peut-être plus grande que ce que nous avions pensé, sur les indicateurs de processus, donc ce qui se passe dans ce que quelqu'un avait appelé la boîte noire autour d'une conférence.

Avec un point, et là, ce serait peut-être une première demande à adresser à EUROSTAT, si on voit bien ce qui concerne les élèves, il y a quelque chose qui a été mis en évidence et qui concernait les moyens, on a d'ailleurs souvent dit que mesurer les moyens par un nombre de professeurs ne voulait rien dire et qu'il fallait essayer beaucoup plus de travailler sur une offre en heures d'enseignement qui assureraient certainement une bien meilleure comparabilité entre les différentes régions, les différents pays, etc. Il faut également essayer de dépasser quelque chose qui est lié aux mesures (il y a un, deux, trois, dix professeurs, et des ratios professeurs/élèves...), pour essayer d'évoluer vers la mesure d'une offre d'enseignement mesurée en heures qui sont données dans l'établissement, qui sont offertes aux élèves. On voit donc tout à fait un jeu, un ensemble d'indicateurs autour de cette question. En votre nom, je crois qu'on peut faire la demande, à la fois pour les statistiques régionales, nationales ou européennes. C'est un concept encore peu utilisé (certains pays l'utilisent cependant), mais je crois que c'est indispensable si on veut assurer une vraie comparabilité.

La deuxième demande qui est apparue, sans vouloir répéter tout ce qui a été dit, est la volonté de se comparer entre régions équivalentes. On ne peut effectivement pas comparer n'importe quoi avec n'importe quoi, ce qui n'apporterait rien à ceux qui auront à lire. Ce serait peut-être une autre demande à adresser à EUROSTAT : ne serait-il pas intéressant d'établir une typologie des régions ? Autrement dit, il y a parmi les cent et quelques régions, il y a des régions voisines, non par la proximité géographique mais par leur profil socio-économique, leur comportement de région. C'est celles-là qu'il faut essayer de

rassembler, pour faire des agrégats de quelques régions. Et c'est dans le cadre d'un agrégat qu'il sera possible de faire les bonnes comparaisons. J'ai entendu dire ici, "On a certaines traditions" en Catalogne, j'ai entendu souvent "La Lombardie, Rhône-Alpes,..." et j'en oublie d'autres, mais qui dit que ce petit regroupement est significatif ? Est-ce qu'il n'y a pas encore cinq ou six, ou dix, qui seraient tout à fait comparables, et qui apporteraient beaucoup à la Catalogne pour se comparer, et pas seulement avec les régions avec lesquelles elle travaille déjà. Donc peut-être ici un besoin d'établir une typologie des régions. Sans doute serait-il bon que les régions, sous une forme ou une autre, fassent connaître cette demande à EUROSTAT.

Au niveau des conditions, il y a une première chose qui a été un peu sous-estimé, c'est l'importance des systèmes d'information, des statistiques de base. Si on n'a pas cela, ce n'est pas la peine d'essayer d'imaginer qu'on va faire de beaux indicateurs dans tous les sens. Bien entendu la statistique est plus ingrate, on aime mieux parler d'indicateurs que de statistiques, mais c'est fondamental car sans statistiques il n'y aura pas d'indicateurs. Chacun doit être conscient que cela repose sur un travail des services statistiques, quelque soit le niveau de ces services. Et à ce sujet, je voudrais dire que bien sûr on pourra faire des enquêtes spécifiques (et il y aura, je pense, des enquêtes spécifiques), mais je voudrais souligner l'importance des données administratives qui sont déjà collectées, ou plutôt qui devraient l'être dans de bons délais. Parce que lorsqu'on observe ce qui se passe aussi bien au niveau d'un Etat que de l'Europe, il y a toujours une ou deux régions qui manquent (qui a oublié, qui n'a pas eu le temps, qui a eu trop de travail...) et qui, n'ayant pas fourni ces statistiques à l'Etat, n'a pas permis à l'Etat de fournir les résultats à EUROSTAT. Si on ne fait pas collectivement un effort de réflexion sur les indicateurs, d'amélioration de la statistique de base, ce n'est pas tellement la peine de parler d'indicateurs. Et là, je crois que les Etats et EUROSTAT ont un rôle très important à jouer. Je signale d'ailleurs qu'EUROSTAT a été la première institution internationale à demander des données régionales - maintenant, cela figurera dans le

questionnaire commun UNESCO, OCDE et EUROSTAT bien sûr - ce qui signifie bien que dès le début on a eu un intérêt pour les régions et je crois qu'il ne se dément pas.

Deuxième chose au niveau des conditions. On peut nettement distinguer quatre phases dans l'élaboration de tout ce qui touche aux indicateurs : la définition de ces indicateurs, la collecte, l'analyse et enfin leur utilisation pour l'action. La définition et l'analyse associent obligatoirement les spécialistes et les administrateurs. Il faut veiller à ce que cette association fonctionne, même si on sait que ça prend du temps, que ce sera coûteux en réunions et qu'il serait bien plus simple de rester tout seul entre deux statisticiens et de faire les indicateurs, mais on sait que ça ne marchera pas. Donc cette phase "définition" qui les analyse, lorsqu'ils sont élaborés, intéresse tout le monde et il faut veiller à la faire en commun. Par contre, la phase "collecte" (et calcul) ne concerne que les spécialistes et je crois que là, c'est quelque chose qui soit peut concerner les statisticiens dans certaines situations, soit une structure un peu à part, mais ayant des liens très importants avec les statisticiens.

Au niveau de l'analyse, je crois qu'il faut que nous soyons tous bien d'accord sur le fait qu'il y a pluralisme de l'analyse, quand on va avoir un ensemble d'indicateurs, peut être trente ou quarante. Eugene Owen nous a bien dit que pour les mêmes chiffres, pour que ça fonctionne, il faut comptabiliser au niveau de l'Etat fédéral américain, au niveau de chacun des cinquante Etats. Pluralisme donc des analyses. Et là, que personne ne dise "Puisqu'à la limite il s'agit d'un indicateur régional, c'est à moi de l'analyser". Non! Il faut veiller à ce pluralisme des analyses qui, s'il n'est pas respecté, multiplie les conflits. Mais il s'agit d'une analyse à partir des indicateurs, d'où l'importance effectivement, de cette analyse à partir des mêmes indicateurs, des mêmes définitions, du même chiffrage donc des mêmes chiffres. Bien distinguer donc l'unicité du système d'indicateurs et des calculs, et pluralisme des analyses pour laisser à chaque acteur sa responsabilité.

Troisième condition : la clarté du lien avec le politique. Ce n'est pas aisément car pour que cela fonctionne il faut une volonté politique. Si

c'est uniquement l'administration qui fait cela, je crois que ça ne marche pas. Au niveau d'un Etat ou d'une région, il faut une volonté politique manifestée par les autorités politiques, qu'elles disent oui à l'évaluation dans les domaines des indicateurs de l'éducation par exemple. Une fois que ces autorités ont dit cela, elles doivent laisser le travail se faire, elles doivent laisser le temps et la responsabilité à ceux qui sont désignés pour faire cela. Ce n'est pas si facile et c'est un peu tout le problème de l'évaluation des politiques publiques car le temps du politique n'est pas le temps du gestionnaire. Il s'agit de deux temps totalement différents qui ne coïncident que très très rarement. C'est bien cela cependant qu'il faut manager, et que ce lien soit clair, qu'il n'y ait pas d'ambiguïté quand on lance les opérations sur les indicateurs que ce soit ceux de l'éducation ou d'autres, car autrement on se réveille un petit peu dans la douleur.

Quatrième condition. Tout le monde a dit effectivement que la publicité, la publication de ces indicateurs de l'éducation, la dissémination des résultats, devait être grande et que ça devait tomber dans le domaine public. Mais on a aussi dit (et là je reprendrai ce qu'a dit Alain Michel) qu'il devait y avoir de nombreux effets pervers quand on sort des chiffres. Ça veut dire que l'instance, ceux qui sont chargés de ces indicateurs de l'éducation, doit avoir une, et je reprendrai ici le mot de "stratégie de communication", d'abord essentiellement vis-à-vis des enseignants et des chefs d'établissement. On y pense moins, mais je crois que c'est aussi important, aussi au niveau des parents d'élèves qu'on a moins cités et puis ce qui est le troisième objectif pour ces actions, pour ces stratégies de communication, c'est les journalistes, tous ceux qui vont écrire des papiers, se saisir de ça et qui sont en friands. En général, je peux vous dire qu'ils s'en saisissent très vite et font tout de suite un papier. Le problème est qu'il faut que le papier soit bon. Alors comme c'est leur responsabilité, il ne s'agit pas du tout de leur dire ce qu'ils doivent mettre mais il faut avoir une stratégie pour être sûr qu'ils aient bien compris les enjeux et que par conséquent ils feront leur métier de journaliste. C'est aussi ce qu'on a dit mais je voudrais le redire, il faut "vendre l'évaluation", je crois que cela veut bien dire

ce que cela veut dire même si le verbe n'est pas très beau et peut choquer certains d'entre vous, mais moi je dis qu'il faut bien la vendre. On a souvent employé le mot sans toujours y mettre du sens mais je crois que là on a commencé à dessiner le sens de ce que cela voulait dire, ça aboutira à cette culture de l'évaluation dont on a beaucoup parlé, mais sans peut-être savoir encore exactement ce que c'est.

L'avenir, on va un peu le voir sur deux plans. Ça sera d'une part à partir de tout ce qui existe déjà. Mettre en oeuvre, choisir certains indicateurs et les chiffrer, ce qui peut être fait assez rapidement (en laissant le temps pour cette négociation), c'est-à-dire qu'on dispose des éléments de base pour le faire. Par contre, sur des éléments beaucoup plus nouveaux, qui ont été cités par les rapporteurs, il faudra faire appel effectivement à des équipes avec des chercheurs pour mettre au point des outils.

Dans quels cadre cela pourrait-il se faire ? Je voudrais d'abord imaginer que les instances régionales responsables de l'éducation pourraient peut-être créer une association européenne des instances régionales chargées de l'éducation (il faudrait sans doute trouver un autre mot), mais enfin l'idée est celle-là : il y a bien une conférence européenne des recteurs, il y a bien de nombreuses associations européennes, pourquoi n'y aurait-il pas une association européenne des instances régionales chargées de l'éducation ? A moins que ce ne soit un sous-groupe, s'il y a une association européenne des régions, faire un sous-groupe. La première chose à laquelle il faut veiller, c'est que cette association, et c'est fondamental, soit ouverte à tous et que ce ne soit pas un petit club de régions qui s'entendent bien, pour une raison ou pour une autre, mais une association ouverte absolument à toutes ces instances, à toutes ces régions de l'Europe, des quinze pays de l'Europe actuellement. Au sein d'une association telle que celle-là, on pourrait imaginer un groupe de travail chargé des indicateurs. Et je crois que s'ils adressaient une demande pour un concours, aussi bien à EUROSTAT ou à la Task Force Ressources Humaines, cette demande serait examinée avec bienveillance ; je ne peux pas me prononcer, ce n'est pas moi qui décide... mais ce que je peux dire c'est qu'il serait bien que

cette demande soit faite. Je crois que, à côté de cette association européenne, il faut que dans chaque région soit créé une espèce de groupe de travail sur lequel cette association européenne s'appuierait, un groupe de travail un peu comme le nôtre associant les trois composantes citées : les chercheurs, les statisticiens et les administrateurs de l'éducation. Un groupe de travail qui ferait que progressivement il y aurait une expertise régionale parce que malgré votre implication forte, malgré l'expertise de certains, on a bien vu que globalement, et Ann West a conclu son exposé là-dessus, il y avait encore un petit peu de manque d'expertise, et ce n'est faire injure à personne que de le dire. Donc s'il y avait la création (au moins pour certaines régions car les régions feront bien ce qu'elles voudront) de ce groupe de travail, ce qui n'est pas obligatoirement une structure administrative, on verrait après s'il faut évoluer vers une structure administrative ; il y a des régions qui sont peut-être plus en avance. On n'est pas obligé de faire tout de suite une structure mais un groupe de travail placé à un bon niveau auprès du ministre régional de l'éducation, afin qu'il ait les coudées franches, mais un groupe de travail associant les trois composantes que j'ai citées tout à l'heure.

Deuxième chose. Je vous ai dit lundi que probablement, sous présidence française, au niveau de l'Europe, il y aurait une réflexion sur l'évaluation en éducation. Une des manifestations sera probablement une réunion de hauts fonctionnaires d'Etat qui examinent ces sujets-là, et ces réunions sont souvent passionnantes. Le jour où ce sera décidé, ce sera annoncé dans les premiers jours de janvier, officiellement, pour le moment rien n'est dit (je n'ai rien dit bien sûr), pourquoi ne pas à ce moment-là aussi faire passer au ministère d'Etat cette fois, des propositions des régions ? Certes, le représentant de l'Etat en fera ce qu'il pense devoir en faire, mais je dirais que ce serait beaucoup plus riche si en plus de ce qu'il a, il a des points de vue régionaux qui complètent, lorsqu'il s'exprimera à ce représentant, à ce haut fonctionnaire (en général ce sont des directeurs de l'enseignement), mais si vous commencez à vous préparer, si les régions leur font passer certains éléments, je pense que la réunion sera d'autant plus fructueuse et prendra en

charge cet aspect indicateur dans l'Europe des régions.

Troisièmement, il n'y a pas encore de programme SOCRATES, mais dans ce programme effectivement il y a beaucoup d'actions, il est prévu de pouvoir organiser et d'aider financièrement des actions d'échange, d'expérience et d'information. Donc, le jour où il se programmera, il pourrait y avoir quelques régions, et là ce n'est pas obligatoirement toutes, quelques régions qui avec quelques universités, quelques centres de recherche... Il faut voir, il faut que ce soit obligatoirement transnational. Si il y a seulement trois régions de France ou d'Espagne, ça ne marche pas, il faut obligatoirement trois pays différents. Mais dans ces conditions, mais ce sera seulement en 1995 et il y aura probablement, aux alentours d'avril, un petit guide qui sera diffusé pour dire comment on peut le faire, comment on peut demander. Mais c'est une possibilité et là vous voyez que ça complète la grande dimension au niveau de l'association européenne où tout le monde est

impliqué, et qui de mon point de vue devrait plutôt traiter de problèmes relatifs à la description de l'état des systèmes, alors que s'il y a trois ou quatre écoles, universités, administrations qui veulent faire quelque chose de meilleure qualité, plus micro-pilotage, elles pourraient s'associer et proposer des projets qui seraient examinés dans le cadre de SOCRATES.

Voilà trois pistes que je voulais vous indiquer et pour terminer je veux juste d'abord remercier M. Fullat qui vient de partir, pour l'organisation de ce séminaire, je veux remercier les trois rapporteurs, Carme, Ann et Alain, parce qu'ils ont eu beaucoup de peine pour faire ces synthèses, remercier les interprètes. Mais avant, un petit mot tout particulier pour vous Mireia qui avez quand même, je crois, beaucoup travaillé avant pour le préparer, pendant pour que cela marche bien, alors en mon nom et en votre nom à tous, je vous remercie beaucoup et je vous demande d'applaudir Mireia.

Merci beaucoup.

**CLOSING CEREMONY
SPEECHES**

SPEECH - CLOSING CEREMONY

Octavi Fullat

Honourable Mr. Minister of Education:

The Higher Council for Evaluation is about to celebrate its first anniversary. When last 9th of December you signed the decree establishing the Council, your concern for the quality of education in our country, and consequently its contextualisation in the European and international frameworks was manifested. The Decree gave a indication of the path to follow towards a well-defined yet distant goal.

The organisation that created it has really sped ahead in its development - it's worth mentioning that it inherited a tradition which facilitated its growth - and during these past few days, on the occasion of the European seminar on "Education Indicators in the Europe of the Regions", we might say that it is making its official introduction into international evaluation society. It does so as a hopeful youth, aware of its limitations yet not suffering from a sterile inferiority complex. It wishes to take its own place in the sun and develop its own possibilities harmoniously with the others - perhaps with legitimate responsibility with the others - but never off to one side, or, even worse, against the others.

We are grateful, satisfied and proud to have had the cooperation in this seminar of most countries in the European Union, of Mexico, and of the United States, of international organisations involved in evaluation, like the IEA and the IAEA, of institutions of the national government and our own regional institutions dedicated to research and the management of evaluation, and the invaluable support of an institution, geared towards teacher training, as rooted in our country as is the Col·legi de Doctors i Llicenciatxs de Catalunya. A whole network, then, of internal and external relations which demonstrate a way of being and of acting and which promise a development full of possibilities.

But we have not come here to tell you about the Evaluation Council, but rather to present you with the proposals and conclusions reached by the 90-plus professionals who worked together these last three days in the Seminar "Education Indicators in the Europe of the Regions". We will now make you a brief summary of these conclusions. You can find more detailed information in the interim document we will be giving you presently.

First point: No one doubts that having and developing a system of indicators as a diagnostic tool is essential for taking measures to improve the educational system.

Second point: When speaking of the European regions, we realize that not all have the same level of responsibility in education. It is important, then, as a first stage, to establish cooperation and links between "equivalent regions", which may enable a homogenisation of aims and a comparability of data. We believe it would be desirable for this situation to be reflected in the EUROSTAT classifications, specifically in the "NUTS 2" group.

Third point: Those regions with a high degree of responsibility within decentralised administrations can be more directly involved in developing educational indicators on a "macro" level, that is, indicators on the educational system as a whole.

It would have to select indicators, for example, those related to context, but should always assure that there be a nucleus of indicators in common with indicators systems on higher levels. As for indicators that describe educational processes, they have to be carefully adapted to the regional situation. Among the indicators on outcomes there should be included indicators dealing with the acquisition of knowledge of that a given region consider essential, such as the region's

language, history, culture and environment.

Although these three points do not capture all the wealth of reflection and knowledge present in the discussions of these past few days, we will now go on to present you some of the proposals that have been discussed.

First proposal: That the systems of indicators on all levels - but especially the regional levels - clarify the indicator on teacher/pupil ratios, and more precisely, the contact hour per pupil.

Second proposal: We should be heading towards a democratic and transparent evaluative culture which would promote the interaction of all involved actors and get rid of the negative image of technocratic esoterism.

Third proposal: to look into the possibility of creating, and possibly take the appropriate steps towards doing so, a European conference/association made up of regional bodies holding full responsibility in the field of education, to promote collaboration, in working groups of administrators, statisticians, educators and managers, in order to allow for the necessary coherence and homogenisation for developing education indicators on a regional level.

I would like to thank everyone who has put effort into analysing questions that, as a European region with a high degree of decentralisation, are of special concern to us. I have no doubt that I can also thank you, sir, for the interest that, I am sure, you will bring to this, so that our work may have practical consequences. I now turn the floor over to you.

SPEECH - CLOSING CEREMONY
THE HONOURABLE COUNCILLOR FOR EDUCATION
Joan Maria Pujals

**Representative of the European Commission,
Dean of the Col.legi de Doctors i Llicenciats,
President of the Higher Council of
Evaluation, Ladies and Gentlemen:**

It is with gratitude and interest that I accept the document presenting conclusions and proposals from the Seminar entitled "Education Indicators in the Europe of Regions". The title in itself suggests many important connotations and I would like to explain some of these here.

Firstly I would like to mention the idea of the "Principal of Subsidiarity" as set forth in the Maastricht Treaty. The last paragraph under Article B of the Treaty states:

"The aims of the Union shall be achieved in agreement with the provisions of this Treaty, according to the conditions and anticipated time periods, and with consideration for the principle of subsidiarity as defined in article 3B..."

I would like to stress part of Article 3B:

"In matters which are not its exclusive responsibility, the Community will intervene according to the principle of subsidiarity, only when the objectives of a particular action cannot be satisfactorily achieved by the Member States..."

This merely repeats and confirms what is stated in the second paragraph under Article A:

"This Treaty constitutes a new stage in the process of creating a closer Union between the people of

Europe, where decisions shall be taken at the closest possible level to the citizens."

This was ratified by the European Council in Birmingham in October 1992:

"We insist that decisions must be taken as close to citizens as possible. It is possible to achieve greater unity without excessive centralisation. Each and every member State must decide how they should exercise their power on a national level."

It would clearly be inconsistent if the principle of subsidiarity in the European Union, as set forth by the Maastricht treaty, was not respected by member states in their own area of responsibility, for this principle is certainly at the very core of the idea of democratic society. Public authorities must not intervene where citizens can do something adequately and efficiently. While different levels of responsibility are established in public authorities, decisions must be taken at the level closest to citizens. This means that the upper levels only intervene when the lower levels cannot do something satisfactorily.

This affects the Union in a number of ways. Subsidiarity effectively reinforces:

- democracy.

It prevents an excessively centralised European authority, distanced from citizens' problems, from being established. One must remember that one of the

basic components of the Union's legitimacy as a democracy is its closeness to citizens;

- transparency.

It enables responsibilities and actions to be shared between the different levels of public authorities. Citizens can identify what each level of administration has responsibility for.

- efficiency.

Subsidiarity implies that responsibility will be given to the level that has the optimum ability to deal with it. This maximises efficiency in the public authorities.

Subsidiarity should be understood as a mechanism for allocating responsibility where it is most appropriate. It must enable decisions taken by public authorities to be effectively adopted at the level closest to citizens. Its specific formulation may constitute a criterion for responsibility; however, as a general principle for stimulating action within the Union, it must be a criterion for distributing areas of responsibility among all the levels of public authorities to guarantee that local and regional authorities have responsibility for the areas they can manage adequately. Tasks like professional training, land management, town planning, technological research and development etc, enable a Region to decide how to implement the major macroeconomic decisions increasingly adopted on a Community level, in order to make itself competitive, with optimum conditions for economic and technological development. State policy should therefore be largely derived from the coordination of regional policies. The whole is characterised by its "components", not the other way round.

The conviction that regionalisation and European integration are two complementary and interrelated processes has led us, in Catalonia, to develop a policy to actively cultivate relationships between regions. Catalonia is a member of the Comunitat de

Treball dels Pirineus (Work Community of the Pyrenees) which also includes Euskadi (Basque Country), Navarra, Aragon, Andorra and, in the Midi-Pyrénées, Languedoc-Roussillon and Aquitaine. We are also, together with Languedoc-Rousillon and Midi-Pyrénées, a Euroregion with a clear Mediterranean focus. On an inter-regional level you are all familiar with the "Four Motors": Baden-Würtemberg, Rhône-Alpes, Lombardy and Catalonia. The "Four Motors" collaborate closely with Wales, and also with Ontario. The regions are less frightened about ceding sovereignty because they have less to lose. This may be one reason why cooperation between regions is a decisive element in the integration of Europe.

The creation of the European Union was dependent on the signing of the Maastricht Treaty, an act of political goodwill by member States. But now this theoretical framework for the European Union has been created, it must be filled with content. In other words, the network of interrelationships must be gradually consolidated from the lowest levels. Financial, social, and academic agents must establish effective links of cooperation and exchange. Companies must work together, universities must exchange students, research centres must carry out joint projects rather than duplicating efforts, etc. As Toffler said, "The future of Europe will be determined by Brussels and by the equilibrium between States and Regions".

It is within this context that you have been working on Education Indicators over the last few days.

Centralisation and decentralisation in education is already a commonplace subject in the field of comparative pedagogy - possibly because we have realised that the framework of state education has become too narrow for current - and particularly future - problems posed by education.

Relationships between national educational systems have increased in recent years, thus generating a multitude of intergovernmental and non-governmental organisations, some of which are amply represented here today. This proliferation of organisations is undoubtedly a response to the need to deal

with new challenges, such as introducing a European Dimension into all levels of the education systems of member States, while also moving towards the decentralisation of education in Europe in accordance with the principle of subsidiarity I mentioned before.

All reference to a European Dimension in education and the decentralisation of education in Europe requires a will to cooperate as well as international and inter-regional solidarity. This ranges from the analysis and formulation of common strategies, aided by tools such as indicators, to adequate provision of resources, which is essential to the development of education in the new Europe.

Our will to cooperate stems from the conviction that the development of education today will lead to economic development tomorrow. We believe that the Education Indicators we are working on now are precursors to our Economic Indicators in the near future.

It is significant that the "Organisation of Economic Cooperation and Development" (OECD) has created the "Centre for Educational Research and Innovation" (CERI) which, in turn, promotes the project on the "Indicators in Education Systems" (INES).

This is the immediate point of reference for this Seminar, now drawing to a close, and whose future results are of interest to us now.

I believe this Seminar has been an exercise for you in European unity, as well as the professional and civic responsibility which has prompted you spend time on joint research, transnational solidarity, and the formulation of questions and answers on this subject.

I would not be acting consistently if, after everything I have said to you, I did not now assume my political responsibility, and thoroughly analyse your conclusions and proposals as well as try to make them a reality in education in our country as far as possible. I fully accept this commitment.

Many thanks, ladies and gentlemen, for your work and your attendance.

In the name of Jordi Pujol, Honourable President of the Generalitat de Catalunya, I hereby close the Seminar "Education Indicators in the Europe of Regions".

LIST OF PARTICIPANTS

(Barcelona)

CATALONIA (SPAIN)

Honour Committee

Molt Hble. Sr. JORDI PUJOL I SOLEY
President
Generalitat de Catalunya
(Barcelona)

Hble. Sr. JOAN Ma. PUJALS
Minister
Departament d'Ensenyament
(Barcelona)

Il.lm. Sr. ANTONI GELONCH
Secretary General
Departament d'Ensenyament
(Barcelona)

Sr. OCTAVI FULLAT
President
Consell Superior d'Avaluació del
Sistema Educatiu
Departament d'Ensenyament
(Barcelona)

Sra. JOSEFINA CAMBRA
Dean
Collegi Oficial de Doctors i
Llicenciat
en Filosofia i Lletres i Ciències de
Catalunya (Barcelona)

Sra. MERCE BERNAUS
Centre de Recursos de Llengües
Estrangeres
Departament d'Ensenyament
(Barcelona)

Sr. RAFAEL BISQUERRA
Departament de Mètodes
d'Investigació
i Diagnòstic en Educació
Facultat de Ciències de l'Educació
Universitat de Barcelona
(Barcelona)

Sr. LLUÍS A. BLANCO
Facultat de Ciències de l'Educació
Universitat de Lleida
(Lleida)

Sra. SARA BLASI
Delegació Territorial d'Ensenyament
Barcelona-Ciutat
(Barcelona)

Sra. IMMACULADA BORDAS
Departament de Didàctica i
Organització Escolar
Facultat de Ciències de l'Educació
Universitat de Barcelona
(Barcelona)

Participants

Sra. MARIONA ALSIUS
Gabinet Tècnic
Departament d'Ensenyament
(Barcelona)

Sra. ROSA AMARGÓS TORRUELLA
Subdirecció General d'Estudis i
Organització
Departament d'Ensenyament
(Barcelona)

Sra. MARIONA BARBA
Gabinet Tècnic
Departament d'Ensenyament

Sra. NÚRIA BORRELL
Departament de Didàctica i
Organització Escolar
Facultat de Ciències de l'Educació
Universitat de Barcelona
(Barcelona)

Sr. ORIOL BUSQUETS
Subdirecció General de la Inspecció
Departament d'Ensenyament
(Barcelona)

Sra. PILAR CAÑADA ILLA
Collegi Públic (C.P.) Castanyer
(Girona)

Sra. ELENA CANO
Departament de Didàctica i Organització Escolar
Facultat de Ciències de l'Educació
Universitat de Barcelona
(Barcelona)

Sr. FERRAN DE CEA
Delegació Territorial de Barcelona
(Barcelona)

Sr. FRANCESC COLOMÉ I MONTSERRAT
Alta Inspecció de l'Estat a Catalunya
(Barcelona)

Sr. ENRIC COROMINAS
Facultat de Ciències de l'Educació
Universitat de Girona
(Girona)

Sra. PEPITA COROMINAS
Subdirecció General de la Inspecció
Departament d'Ensenyament
(Barcelona)

Sr. PERE CUEVAS BIELSA
Institut de Batxillerat (I.B.) Balmes
(Barcelona)

Sra. LOLA ENCABO
Centre de Recursos de Llengües Estrangeres
Departament d'Ensenyament
(Barcelona)

Sra. MARIONA ESCOBAR
Ajuntament de Barcelona
(Barcelona)

Sr. FERRAN FERRÉ
Departament de Pedagogia Sistemàtica i Social
Universitat Autònoma de Barcelona
(Bellaterra)

Sra. TERESA FERRÉ
Collegi Oficial de Doctors i Llicenciat en Filosofia i Lletres i Ciències de Catalunya
(Barcelona)

Sra. ISABEL FONS
Gabinet Tècnic
Departament d'Ensenyament
(Barcelona)

Sr. JOAQUIM GAIRIN
Departament de Pedagogia Aplicada
Universitat Autònoma de Barcelona
(Bellaterra)

Sr. JOSEP GALLIFA
Facultat de Psicologia i Pedagogia
Bланquerна
Universitat Ramon Llull
(Barcelona)

Sr. JOSEP GÓMEZ ANDRÉS
Collegi Públic (C.P.) Sant Miquel
(Cornellà de Llobregat)

Sr. JOSEP GONZÁLEZ AGÁPITO
Facultat de Ciències de l'Educació
Universitat de Barcelona
(Barcelona)

Sr. MARÍA IBAR
Institut Químic de Sarrià
(Barcelona)

Sra. DOLORS IDUARTE
Consell Superior d'Avaluació del Sistema Educatiu
Departament d'Ensenyament
(Barcelona)

Sr. BONIFACIO JIMÉNEZ
Departament d'Educació i Psicologia
Universitat Rovira i Virgili
(Tarragona)

Sr. RAMÓN JUNCOSA
Direcció General de Coordinació i Seguiment Sectorial
Departament de la Presidència
(Barcelona)

Sra. SOFIA LÀZARO
Consell Superior d'Avaluació del Sistema Educatiu
Departament d'Ensenyament
(Barcelona)

Sr. ISMAEL LECINA LANAU
Collegi Públic (C.P.) Joan Maragall
(Sant Cugat del Vallés)

Sra. MARIA ROSA MÀNDOLI
Subdirecció General de Gestió Econòmica
i Règim Interior
Departament d'Ensenyament.(B)

Sr. JOSEP ANDREU MARTÍN RIOJA
Institut de Ciències de l'Educació (ICE) de la Universitat Politècnica de Catalunya (Barcelona)

Sr. JOAN MATEO
Institut de Ciències de l'Educació (ICE) de la Universitat de Barcelona (Barcelona)

Sr. MIQUEL MARTÍ
Centro Unesco de Catalunya (Barcelona)

Sr. JOSEP MONTANÉ I CAPDEVILA
Àrea de Mètodes d'Investigació i Diagnòstic en Educació
Departament de Pedagogia Aplicada
Universitat Autònoma de Barcelona (Bellaterra)

Sra. MIREIA MONTANÉ
Consell Superior d'Avaluació del Sistema Educatiu
Departament d'Ensenyament (Barcelona)

Sra. NÚRIA MORATÓ
Centre de Recursos de Llengües Estrangeres (Barcelona)

Sr. ANTONI OLONA CABASES
Institut d'Ensenyament Secundari (I.E.S.) Ronda (Lleida)

Sr. ESTEVE OROVAL
Universitat de Barcelona
Facultat d'Empresarials
Departament d'Economia Política (Barcelona)

Sr. CASSIÀ PÉREZ
Consell Superior d'Avaluació del Sistema Educatiu
Departament d'Ensenyament (Barcelona)

Sra. MARIA PLÀ
Departament de Didàctica i Organització Escolar
Facultat de Ciències de l'Educació
Universitat de Barcelona

Sr. JORDI PORTA
Fundació Jaume Bofill (Barcelona)

Sr. RAMÓN PORTAVELLA I CREMADA
Institut de Ciències de l'Educació (ICE) de la Universitat Politècnica de Catalunya (Barcelona)

Sr. JOSEP MARIA REFUSTA
Subdirecció General de la Inspecció Departament d'Ensenyament (Barcelona)

Sr. GERARD REYNÉ
Delegació Territorial d'Ensenyament de Girona (Girona)

Sr. JESÚS RUL
Delegació Territorial de Barcelona-Comarques (Barcelona)

Sr. ALBERT SANGRÀ
Responsable de Formació Generalitat de Catalunya Departament de la Presidència (Barcelona)

Sr. ANTONI SANS
Departament de Mètodes d'Investigació i Diagnòstic en Educació Facultat de Ciències de l'Educació Universitat de Barcelona (Barcelona)

Sr. JAUME SARRAMONA
Consell Escolar de Catalunya (Barcelona)

Sr. MANUEL SATUÉ
Collegi Oficial de Doctors i Llicenciats en Filosofia i Lletres i Ciències de Catalunya (Barcelona)

Sra. CARME SEGURA
Consell Superior d'Avaluació del Sistema Educatiu
Departament d'Ensenyament (Barcelona)

Sra. DOLORS SOLÉ
Centre de Recursos de Llengües
Estrangeres
(Barcelona)

Sra. MARINA SOLÉ
Universitat de Barcelona
Departament d'Economia Política
(Barcelona)

Sra. ASSUMPTA SOPEÑA
Institut d'Ensenyament Secundari
(I.E.S.) Badalona IX
(Badalona)

Sr. JOSEP TARRAGÓ CASANOVA
Collegi Públic (C.P.) La Canonja
(Tarragona)

Sr. JAUME TORT
Secretaria General
Departament d'Ensenyament
(Barcelona)

Sra. ISABEL TRAVESSET
Collegi Oficial de Doctors i
Llicenciat en Filosofia i
Lletres i Ciències de Catalunya
(Barcelona)

Sra. ESTER VENDRELL
Consell Superior d'Avaluació del
Sistema Educatiu
(Barcelona)

Sra. CARME VIDAL
Parlament Català
(Girona)

Sra. JOANA VIDAL SALVADOR
Oficina Europea
Departament d'Ensenyament
(Barcelona)

SPAIN

Sr. IGNACIO GIL BERMEJO
Instituto Andaluz de Evaluación y
Formación del Profesorado
Consejería de Educación y Ciencia
(Seville)

Sra. ISABEL MUÑOZ
Ministerio de Educación y Ciencia
Subdirección General de la Oficina
de Planificación
(Madrid)

Sr. RAMÓN PAJARES BOX
Instituto Nacional de Calidad y
Evaluación
(Madrid)

Sr. CARLOS TAVARES SANTOS
Consejería de Educación de Canarias
(Las Palmas de Gran Canaria)

AUSTRIA

M. WOLFRAM HIEBL
(Senior Education Adviser)
Research Department
Ministry of Education and the Arts
(Vienna)

BELGIUM

M. GILBERT L. DE LANDSHEERE
Service de Pédagogie Experimentale
Faculté de Psychologie et Sciences
de l'Education
Université de Liège au
Sart-Tilman
(Liège)

FINLAND

Mr KIMMO LEIMU
(Senior Researcher)
Institute for Educational Research
University of Jyväskylä
(Jyväskylä)

FRANCE

M PAUL ESQUIEU
(Chargé de Mission)
Ministère de l'Éducation
National(Vanves)

M ALAIN MICHEL
(Inspecteur Général de l'Education
Nationale)
Ministère de l'Education Nationale
(Paris)

Mme FRANCINE VANISCOTTE
Institut National de Recherche
Pédagogique
(Paris)

UNITED KINGDOM

GERMANY

Herr RAINER H. LEHMANN
University of Hamburg and
Humboldt-University at Berlin
(Hamburg, Berlin)

Ms SHELagh RAE
Central Regional Council
(Stirling, Scotland)

ITALY

Sr. ALBERTO ARDONI
Università di Padova
Facoltà di Psicologia /Dip. Psic.
Gener.
(Padova)

Ms ANNE WEST
Centre for Educational Research
London School of Economics and
Political Science
(London, England)

Sr. LUCIO PUSCI
Centro Europeo dell'Educazione
(Frascati)

UNITED STATES

Mr EUGENE OWEN
National Center for Educational
Statistics
(Washington, D.C.)

MÈXICO

**Sr. FERNANDO CÓRDOVA
CALDERÓN**
General Direction of Evaluation,
Incorporation and Revalidation
Ministry of Education
(Mexico City)

EUROPEAN UNION

Sr. ROBERTO PEÑA
General Direction of Evaluation,
Incorporation and Revalidation
Ministry of Education
(Mexico City)

Ms BETTINA KNAUTH
Eurostat - Statistical Office of the
European Communities
European Commission
(Luxembourg)

M PIERRE MONDON
Task Force - Ressources Humaines,
Education,
Formation et Jeunesse
Commission des Communautés
Européennes
(Brussels)

**INTERNATIONAL ASSOCIATION FOR
EDUCATIONAL ASSESSMENT (IAEA)**

NETHERLANDS

Mr MAX VAN HERPEN
Statistics Netherlands
(Voorburg)

Mr HENRY G.MACINTOSH
IAEA
(Camberley, Surrey, England)

SWEDEN

Mr BERTIL BUCHT
Swedish Ministry of Education and
Science
(Stockholm)

**INTERNATIONAL ASSOCIATION FOR
THE EVALUATION OF EDUCATIONAL
ACHIEVEMENT (IEA)**

Mr WIM HAYES
I.E.A.
(The Hague)

BIBLIOGRAPHY

AUSTRIA

Education at a Glance. Basic data of first, second, and third level (non-university) education in Austria. Academic year 1991/92. Vienna, Austria: Federal Ministry of Education and Arts, 1992.

Federal Ministry of Education and Arts Informs. Education in Austria. Vienna, Austria: Federal Ministry of Education and Arts, 1990.

Plank, F.H. (Comp.). Education in Austria. A Concise Presentation. Vienna, Austria: Federal Ministry of Education and Arts, 1991.

BELGIUM

Landsheere, V. de. Faire Réussir. Faire Échouer. La compétence minimale et son évaluation. Puf. Pédagogie d'aujourd'hui. Paris. 1988.

EUROSTAT

Bülow, H. and Whitten, P. Pupils and Students in the Community Regions 1990/91. Rapid Reports. Regions. Luxembourg: Statistical Office of the European Communities, 1993.

Bülow, H. and Whitten, P. Eleves et étudiants dans les régions de la communauté 1990/91. Statistiques Rapides. Régions. Luxembourg: Statistical Office of the European Communities, 1993.

Community Educational Indicators-Phase Two: Report to Member States. Doc OS/E3/94/ED 03. Meeting 6-8 July 1994. Education and Training Statistics. Luxembourg: Statistical Office of the European Communities.

EUROSTAT. Regions Statistical Yearbook. Theme General Statistics (1). Series Yearbooks (A). Luxembourg: Statistical Office of the European Communities, 1993

EUROSTAT. Regio. Banque de données régionales. Description du contenu. Luxembourg: Statistical Office of the European Communities.

EUROSTAT. Regio. Regional data bank. Description of contents. Luxembourg: Statistical Office of the European Communities.

EUROSTAT. Regions. Nomenclature of Territorial Units for Statistics. Nuts. Luxembourg: Statistical Office of the European Communities, March 1992.

Whitten, P. Education across the European Union 1991/92. Rapid Reports. Population and social conditions. Luxembourg: Statistical Office of the European

Communities, 1994.

Whitten, P. L'enseignement dans l'Union Européene 1991/92.

Statistiques Rapides. Population et Conditions Sociales. Luxembourg: Statistical Office of the European Communities, 1994.

FRANCE

Michel, A. "L'avenir du système éducatif français. Deux scénarios à l'horizon 2000". Revue Futuribles, n° 173, février 1993.

Michel, A. (éditorial). "Les travaux de l'OCDE sur l'Éducation".

Revue de l'Association Française des Administrateurs de l'Éducation. Administration et éducation, 64, 4^{ème} trimestre, 1994.

Ministère de l'Éducation Nationale. Géographie de l'école. Vanves: Ministère de l'Éducation Nationale. Direction de l'Evaluation et de la Prospective, n° 2, Février 1994.

Ministère de l'Éducation Nationale. 30 Indicateurs sur le Système Educatif. L'état de l'école. Vanves: Ministère de l'Éducation Nationale. Direction de l'Evaluation et de la Prospective, n° 4, Octobre 1994.

I.E.A.

Degenhart, R.L. (Ed.). Thirty Years of International Research.

An Annotated Bibliography of IEA Publications (1960-1990). The Hague, The Netherlands: IEA, 1990.

Elley, W.B. How in the World Do Students Read?. IEA Study of Reading Literacy. Hamburg: IEA, 1992.

IEA (Ed.). Monitoring the Quality of Education Worldwide.

The Hague, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

Keeves, J.K. Learning Science in a Changing World. Cross-national Studies of Science Achievement: 1970 to 1984. The Hague, The Netherlands: IEA.

Lundberg, I. and Linnakylä, P. Teaching Reading around the World.

IEA Study of Reading Literacy. The Hague, The Netherlands: IEA, 1993.

Willem, J., et al. The Use of Computers in Education Worldwide. Results from the IEA 'Computers in Education' survey in 19 education systems. United Kingdom: Pergamon Press.

Pelgrum, W.J. et al.(Ed.).Schools, Teachers, Students and Computers: a Cross-National Perspective. Comped Study

Stage 2. The Hague, The Netherlands: IEA.

Postlethwaite, T.N. and Ross, K.N. Effective Schools in Reading. Implications for Educational Planners. An Exploratory Study. The Hague, The Netherlands: IEA, 1992

ITALY

Ardoni, A. "Il libro di testo per la scuola primaria". Orientamenti Pedagogici. Rivista Internazionale di Scienze dell'Educazione. Rome: Facoltà di Scienze dell'Educazione dell'Università Salesiana, anno XLI, n.2, 1994.

Ardoni, A. "L'insegnamento delle scienze nel secondo ciclo della scuola elementare attraverso un'analisi comparata dei sussidiari". Orientamenti Pedagogici. Rivista Internazionale di Scienze dell'Educazione. Rome: Facoltà di Scienze dell'Educazione dell'Università Salesiana anno XLI, n.5, 1994

Ministero della Pubblica Istruzione. L'Istruzione in Italia. Roma: Ministero della Pubblica Istruzione. Direzione Generale per gli Scambi Culturali. Biblioteca di Documentazione Pedagogica, 1992.

Sensini, A. "Il Centro. Dalle Regioni all'Europa". Educazione civica. Quaderno Regionale. Roma: Armando Scuola, 1990.

Sensini, A. "Le Isole. Dalle Regioni all'Europa". Educazione civica. Quaderno Regionale. Rome: Armando Scuola, 1990.

Sensini, A. "Il Nord Est. Dalle Regioni all'Europa". Educazione civica. Quaderno Regionale. Rome: Armando Scuola, 1990.

Sensini, A. "Il Nord Ovest. Dalle Regioni all'Europa". Educazione civica. Quaderno Regionale. Rome: Armando Scuola, 1990.

Sensini, A. "Il Sud. Dalle Regioni all'Europa". Educazione civica. Quaderno Regionale. Rome: Armando Scuola, 1990.

Fabrizio, F. et al. "Valutazione dell'efficacia del Piano Pluriennale di Aggiornamento sui. Nuovi Programmi Didattici della. Scuola Elementare".

Quaderni serie informazione. Vol.1.n° 4-A: Venezia: IRRSAE Valle d'Aosta. Università Ca' Foscari - Venezia.

MEXICO

Secretaría de Educación Pública. Compendio Estadístico del Gasto Educativo 1993. Mexico City: Secretaría de Educación Pública. Subsecretaría de coordinación educativa. Dirección General de Planeación, Programación y Presupuesto. Dirección de análisis y sistemas de Información, 1993.

Secretaría de Educación Pública. Estadística Básica del Sistema Educativo Nacional. Fin de cursos 1992-1993. Mexico City: Secretaría de Educación Pública. Subsecretaría de coordinación educativa. Dirección General de Planeación, Programación y Presupuesto. Dirección de análisis y sistemas de Información, 1993. (ISBN 968-29-6335-0).

OECD

Centre for Educational Research and Innovation. Education at a Glance. OECD Indicators. Paris: OECD Publications, 1993. (ISBN 92-64-03894-9)

SPAIN

Andalucía

Consejería de Educación y Ciencia. Evaluación Interna de la Experimentación de la Reforma en Andalucía. EGB y Ciclo Polivalente de las Enseñanzas Medias. Junta de Andalucía, Consejería de Educación y Ciencia, Dirección General de Renovación Pedagógica y Reforma, Programa de Reforma, Equipo de Seguimiento y Evaluación.

Pérez, A.I. y Sacristán, J.G. Evaluación de un Proceso de Innovación Educativa. Evaluación educativa 1. Junta de Andalucía, Consejería de Educación y Ciencia, Instituto Andaluz de Evaluación Educativa y Formación del Profesorado.

Catalunya

Departament d'Ensenyament. Estadística de l'Ensenyament. Curs 1990-1991. Barcelona: Generalitat de Catalunya, Departament d'Ensenyament.

Ferrández, A. et al. Investigació sobre la Qualitat Universitaria. Bellaterra, Barcelona: Departament de Pedagogia i Didàctica, Facultat de Lletres, Universitat Autònoma de Barcelona.

Madrid

Ferrández, A. et al. "Evaluación de programas y cursos". La evaluación en la educación de las personas adultas. Madrid: Diagrama, 1993

Gairín, J. (Dir.). Estudio de las necesidades de formación de los equipos directivos de los centros educativos. Concurso Nacional de Proyectos de Investigación Educativa, 1992. Orden 13-1-1992 (BOE 10-2-1992). 1994.

Gairín, J. "La autoevaluación institucional como vía para mejorar los centros educativos". Bordón, 45(3), 1993.

Gairín, J. La evaluación de un curso ACD, modalidad A

Gairín, J. (Coord.). "Plan de Generalización de los Cursos de Formación para Equipos Directivos de los Centros educativos". Informe de evaluación. Madrid: Subdirección General de Formación del Profesorado, MEC, 1991.

Oficina de Planificación. Estadística de la Enseñanza en España 1991/92. Madrid: Ministerio de Educación y Ciencia, Oficina de Planificación Subsecretaría, Centro de Publicaciones, Secretaría General Técnica, Ministerio de Educación y Ciencia, 1992.

Oficina de Planificación. Estadística de la Enseñanza en España 1993/94. Madrid: Ministerio de Educación y Ciencia, Oficina de Planificación Subsecretaría, Centro de Publicaciones, Secretaría General Técnica, Ministerio de Educación y Ciencia, 1994.

SCOTLAND

"Graduates and Diplomates from Higher Education Courses and their First Destinations: 1981-82 to 1990-91." Statistical Bulletin. Education series. Edinburgh: Government Statistical Service, The Scottish Office, 1993.

"Pupils and Teachers in Education Authority Primary and Secondary Schools". Statistical Bulletin. Education series. Edinburgh: Government Statistical Service, The Scottish Office, 1994.

"Scottish Higher Education Statistics". Statistical Bulletin. Education series. Edinburgh: Government Statistical Service, The Scottish Office, 1992.

"Scottish School Leavers and their Qualifications 1982-83 to 1992-93". Statistical Bulletin. Educational series. Edinburgh: Government Statistical Service, The Scottish Office, 1994.

"Students Registered in Vocational Further Education in Scotland 1990-91". Statistical Bulletin. Education series. Edinburgh: Government Statistical Service, The Scottish Office, 1993.

"The Curriculum in Education Authority Secondary Schools in Scotland 1983-1991. Statistical Bulletin. Education series. Edinburgh: Government Statistical Service, The Scottish Office, 1993.

"The National Certificate 1992-93". Statistical Bulletin. Educational series. Edinburgh: Government Statistical Service, The Scottish Office, 1994.

SWEDEN

Education Sweden 1994. Sweden: Publication Services, Statistics Sweden, 1994.

U.K.

Lewy, A. (Ed.). Studies in Educational Evaluation. Vol.18, n° 3. Oxford: Pergamon Press, 1992. ISSN 0191-491X

Lewy, A. (Ed.). Studies in Educational Evaluation. Vol.19, n° 2. Oxford: Pergamon Press, 1992. ISSN 0191-491X.

Wolf, R.M. (Ed.). The Second International Science Study. International Journal of Educational Research. Vol.17, n° 3/4, Oxford: Pergamon Press, 1992. ISSN 0883-0355

"Education Expenditure from 1979-80". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994. Issue n° 4/94.

Education Statistics for the United Kingdom. Government Statistical Service, HMSO, Department for Education Welsh Office, Scottish Office Education Department, Department of Education for Northern Ireland, Universities Funding Council.

Education Statistics Northern Ireland 1977/8 - 1991/2. Bangor: Department of Education.
"Gcse and Gce a/as Examination Results 1992/93". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994. Issue n° 7/94.

"Gcse and Gce a/as Level Performance of Candidates Attempting Two or More Gce a/as Levels". Statistical Bulletin.

"Mature Students in Higher Education - Great Britain 1982 to 1992". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994. ISSUE n° 16/94

McCallum, I. (Ed.) Education in London. Key Facts. London: London Research Centre, 1994.

"Participation in Education by 16-18-Year-Olds in England: 1983/84 to 1993/94". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994 Issue n° 10/94.

"Participation in Education by Young People Aged 16 and 17 in each Local Education Authority and Region of England: 1988/89 to 1992/93". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994 Issue n° 11/94.

Performance Tables (16-18 age group). School and College. Bristol: Department for Education, 1993.

Performance Tables 1993. Secondary School. Bristol: Department for Education, 1993.

"Pupils and Teachers in Grant-Aided Schools- January 1990". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994. Issue n° 1/94.

"School Leavers 1991/92". Statistical Bulletin. Darlington: Government Statistical Service, Department for Education, 1994. Issue n° 2/94.

School Performance Information 1992/93. Bangor: The Department of Education for Northern Ireland, 1993.

School Performance Tables. Public Examination Results 1992. Standard. Bristol: Department for Education, 1993.

"Special Issue on Performance Indicators". Evaluation & Research in Education. The Durham and Newcastle Research Review. Vol. 4, n° 2. England: Multilingual Matters, 1990.

Taylor, C. The Design of Indicator Systems, the Role of Education in Universities, and the Role of Inspectors/Advisers: a Discussion and a Case Study.

UNITED STATES

National Center for Education Statistics. The Condition of Education 1994. Washington: National Center for Education Statistics. U.S. Department of Education. Office of Educational Research and Improvement NCES, 94-149.

Ibid. The National Education Goals Report. Washington: Building a Nation of Learners, 1994.

Ibid. The National Education Goals Report. Building a Nation of Learners, 1994.

Ibid. The Condition of Education 1994. U.S. Department of Education, Office of Educational Research and Improvement NCES 94-149.

Ibid. Education in States and Nations: Indicators Comparing U.S. with the OECD. U.S. Department of Education, Office of Educational Research and Improvement, NCES 93-237, 1988.

PUBLICATIONS AVAILABLE FROM

Departament d'Ensenyament
Servei de Difusió i Publicacions, Gabinet Tècnic
Av. Diagonal, 682, 08034 Barcelona, Spain
Phone: (34) 3 2801717

Department's Analytical Services Branch
Mowden Hall, Staindrop Road, Darlington, England
Co. Durham, DL3 9BG, U.K.
Phone: (44) 3 25392683

Department of Education
Statistics Branch, Balloo Road
Bangor, Co Down BT19 7PR, U.K.
Phone: (44) 2 47270077 Ext. 2391

Department of Education for Northern Ireland
Rathgael House, Balloo Road, Bangor
County Down, BT19 7PR, U.K.
Phone: (44) 2 47270077

Educazione civica
Piazza Sidney Sonnino, 13, 00153 Roma, Italy
Phone: (39) 6 5817245 - 5806420

Federal Ministry of Education and Arts
A-1014 Wien, Minoritenplatz 5, Austria

Géographie de l'école
DEP A2, 58 bd du Lycée 92170 Vanves, France
Phone: (33) 16 1 40657204 Fax: (33) 16 1 40657229

HMSO Publications Center
P.O. Box 276, London, SW8 5DT, England, U.K.
Phone: (44) 1 8739090 Fax: (44) 1 8738200

I.A.E.A.
Mr Henry G. Macintosh (Brook Lawn, Middleton Road,
Camberley, Surrey, GU15 3TV, England, U.K.
Phone: (44) 27623950 Fax: (44) 27662332

I.E.A.
Mr Win Hayes
Sweelinckplein 14, 2517 GK The Hague, The Netherlands

Instituto Andaluz de Evaluación y Formación del Profesorado
Consejería de Educación y Ciencia
Av. República Argentina, 24, 11th, 41011 Sevilla, Spain
Phone: (34) 5 4278258 Fax: (34) 5 4278369

London Research Centre (071-627 9656)
81 Black Prince Road, London SE1 7SZ, U.K.

Multilingual Matters Ltd, Bank House
Hill Road, Clevedon, Avon BS217HH, England, U.K.
Phone: (44) 272 876519 Fax: (44) 272 343096

National Center for Education Statistics
555 New Jersey Avenue, N.W. Mailstop 5650, Room 516
Washington, DC 20277-2935, U.S.

National Goals Panel
1850 M Street, N.W., Suite 270, Washington, D.C., U.S.
Phone: (1) 202 6230952 Fax: (1) 202 6320957

OECD Publications
2 rue André-Pascal, 75775 Paris, France Cedex 16

Orientamento Pedagogici
SEI, Corso Regina Margherita, 176, 10152 Torino
Piazza dell'Ateneo Salesiano, 1, 00139 Roma, Italy

Pergamon Press plc
Headington Hill Hall, Oxford OX3 OBW, England, U.K.

Presses universitaires de France
108, boulevard Saint-Germain, 75006 Paris, France

Revue de l'Association Française des Administrateurs de l'Éducation
Secrétariat: 28, rue du Général-Foy, 75008 Paris, France
Phone: (33) 1 42931201 Fax: (33) 1 42941198

Revue Futuribles
55, rue de Varenne, 75341 Paris Cedex 07, France
Phone: (33) 1 42226310 Fax: (33) 1 42226554

Statistical Office of the European Communities
Telex. COMEUR LU 3423
Rue de la Loi 200, B-1049 Brussels, Belgium
Phone: (32) 2991111 - 2351111

Statistics Sweden, Publication Services
S-701 89 Örebro, Sweden
Phone: (46) 191768 Fax: (46) 196932

Ministerio de Educación y Ciencia (MEC)
Subdirección General de la Oficina de Planificación
Vitruvio, 2, 5^a planta, 28006 Madrid, Spain
Phone: (34) 1 5632125 Fax: (34) 1 5623602

The Scottish Office Central Statistics Unit
Mr M. Guthrie
Room 5/52, New St Andrew's House, Edinburgh EH1 3TG, U.K.
Phone: (44) 31 2444991