# The Future of Education in Latin America and the Caribbean

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# The Future of Education in Latin America and the Caribbean:<sup>1</sup>

# Simon Schwartzman<sup>2</sup>

### Summary

In the next fifteen years, education in Latin America and the Caribbean will suffer the negative impacts of economic stagnation, political instability and dwindling capacity of governments to develop long term, sustained social policies. Economic and cultural globalization will have a very negative impact, increasing the levels of inequality and social exclusion that are already high in the region. Educational institutions will be transformed by trends such as the generalization of quantitative assessments, the universalization of initial education, the growing relevance of science and technology in basic education curricula, the adoption of new educational technologies, and a growing demand for life-long education. To respond to this challenge of large transformations and growing needs, in an unfavorable economic and political environment, the countries will respond by increasing the levels of participation and involvement of all sectors of society with educational matters, and a growing decentralization of educational institutions from central governments and administration to the grassroots. Government initiated projects of educational reform are unlikely to succeed if they do not involve the community and disregard what happens in the daily life of schools. New information technologies can be an important instrument for the improvement of education, but are not as nearly as important as an upgrading of the teaching profession.

<sup>&</sup>lt;sup>1</sup> This work was done at the request of UNESCO's Regional Office for Education for Latin America and the Caribbean,. All the concepts, ideas and judgments in this paper are the individual responsibility of the author, and should not be taken as representing the views of his organization, UNESCO or any of its officers and representatives.

<sup>&</sup>lt;sup>2</sup> American Institutes for Research, Brasil, with the assistance of Helena Bomeny, Fundação Getúlio Vargas, Brazil.

This is the dominant picture that emerges from the first round of results of a Delphi study on the prospects of education in the region, answered by a panel of 50 experts and 32 other educational authorities and opinion leaders. Experts and influentials were invited to participate based on their reputation, and from indications from each other. It was not a representative sample in any sense, but it expressed the views of a very significant group of persons, who set the agenda for research, discussions and policy orientations of many governmental, non-governmental and multi-lateral institutions.

For this analysis, we made a distinction between "experts" and "influentials", considering experts those that have done research and published studies on educational issues. This distinction is not perfect, since experts are often influentials as well; for these cases, the "expert" classification prevailed. Comparisons between the views of experts and influentials show some significant differences, suggesting the existence of gaps in perception and orientation between specialists and those more directly involved in shaping public opinion and implementing policies. In general, however, their views converge, suggesting the existence of significant consensus about the main educational issues in the region.

#### Background

At the end of the 20<sup>th</sup> century, Latin American countries prepared a retrospective assessment of the development of basic education in recent decades. They concluded that in general, the region was still far from achieving the objectives proposed by its societies and governments in such initiatives as the Major Project in the Field of Education (MPFE, 1981) and in the Education For All Conference (Jomtien, 1990). Despite widespread efforts to provide universal basic education, reduce illiteracy, and improve the quality and efficiency of education, we enter the 21<sup>st</sup> century with many issues that were the targets of the MPFE still unsolved. The Education For All Declaration, for its part, offered a new conception of the nature and the role of education. In practice, however, in terms of educational content, pedagogy, and management, this new concept was diluted in most countries to conventional, non-innovative procedures.

What is the short-term outlook for the next 15 years? Two possible, contradictory trends stand out:

- Education will continue to have cultural, personal, and social equity value. In addition, there is a consensus that recent changes in the world economy make it an increasingly necessary tool for ensuring future national economic viability.
- There are distressing signs that economic and cultural integration fostered by globalization may affect negatively the economies of the countries in the region, by increasing social exclusion and inequalities, and by reducing the capacity of governments to invest in social policies, and especially in education.

Trends do not mean that the future is written. Education systems can and will change. They can incorporate new forms of organization, new resources, new methodologies, and new instruments, and gather more support from society. By doing so, they can overcome the constraints imposed by even the most pessimistic social and economic scenarios.

To think about future scenarios and to help propose alternatives, UNESCO has decided to carry out a study of the future of education in the region. This text presents the results of the answers to a questionnaire organized according to the well-known "Delphi" methodology, presented to a panel of 82 experts and persons representing different sectors that directly or indirectly impact education in the region. The questionnaire presented the panelists with general and strong statements, to which they could react, expressing their ideas more forcefully.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> This strategy succeeded, in general, but some respondents objected to the way the questionnaire was phrased, believing that it had some implicit, non-declared assumptions, specially regarding the relationships between education and work. There were open-ended questions, however, for respondents to express their own views, and many did just that. Another objection was that the questionnaire assumed that Latin America and the Caribbean make an homogeneous region, without taking into account the deep differences that exist among countries. This is a valid criticism and points to an important limitation of this study, which was unavoidable, however, given the constraints of time, resources and the need to provide a comprehensive view.

This is not an attempt to predict the future in a naï ve sense. However, experts and influential persons are more likely than others to understand current trends and imagine what we can expect from them, and also to shape the future to a certain measure. We wish to better understand the constraints we will have to face in the coming years, and to identify instruments or tools we can use in order to improve our present situation.

The Delphi technique is supposed to be an interactive process, in which the panelists are first asked to present their views, and then have opportunities to revise them based on the information they receive about the collective views of the group.<sup>4</sup> For this study, we distributed the analysis of the first results to all respondents, asking them to send additional comments or changes in their first responses, and we convened a workshop of a small number of experts, which met for three days in Santiago, Chile, to present and discuss a series of papers related to the main questions of the survey. Very few of the panelists chose to send additional comments or changed their opinions after viewing the survey's first results. The workshop, however, was an excellent opportunity to clarify and deepen the understanding of most of the issues presented in the survey<sup>5</sup>. We decided, therefore, to consider the workshop as the second and last round of the Delphi survey, and not to send out another questionnaire to the panelists.

<sup>&</sup>lt;sup>4</sup> The Delphi technique was fist developed at the Rand Corporation in the US in the late forties as an instrument for eliciting expert opinion on a variety of topics, and more specially for technological forecasting. Hundreds of studies were carried on using this approach, and it became clear, very soon, that its main strength is not as an instrument for the production of accurate forecasts, but as a way to identify issues and questions which are important when one wants to anticipate future scenarios. See, for a general presentation and critical view, H. Sackman, *Delphi Assessment: Expert Opinion, Forecasting and Group Process.* The Rand Corporation, 1974.

<sup>&</sup>lt;sup>5</sup> The papers presented in the workshop, together with other contributions and links, can be found at <u>http://www.ip3.org/delphi</u>.

# The broader context

# Globalization

Table 1 – The global context <sup>6</sup>		
	Probability (1, very unlikely; 5; very likely)	Impact (1, very negative; 5, very positive)
Economic reorganization, with globalization and growing emphasis on the symbolic content of products and activities will tend to increase exclusion and social inequalities even more in the region.	gebelazadón	globalización
Countries will have growing difficulties using public resources for social policies; budgets for basic education will be smaller.	gestes piblices	gentos públicos de la constantinación de la
The economies of most countries in Latin America and the Caribbean will stagnate, or will not grow significantly	creation economico	revenimento económico
Democracies will have difficulty establishing themselves, will replaced by populist governments or will face problems of instability.	gobernabildad	gebienabildad u gebienabildad u generabildad u generabildad u generabildad u generabildad x: 2.10 sd 1.222

The panel members were presented with several statements related to the broader context that could affect education in the next fifteen years. Table 1 presents the answers to these questions<sup>7</sup>.

<sup>&</sup>lt;sup>6</sup> This and the following tables reproduce the phrases used in the English version of the Delphi survey.

<sup>&</sup>lt;sup>7</sup> For each statement, the panelists were asked to say if they were very likely (5) or very unlikely (1) to happen, and whether they would have a very positive (5) or a very negative (1) impact in the future of the region. Statements with an average response close to 3 on its probability can be interpreted as meaning that the panel was undecided about their likelihood; statements with an average response close

Of the different broad trends presented for evaluation in the survey, the panelists chose the economic effects of globalization as the most likely to occur, with a very negative impact in the region, increasing social exclusion and social inequalities. In the workshop, José Joaquin Brunner commented on the tendency among intellectuals and policy makers to look at globalization as an over-encompassing trend, from which broad consequences are supposed to follow, without much effort to identify its different aspects and consequences in specific contexts. He noted that the term is used to represent trends that are not necessarily related to each other, and does not account for the fact that different countries react to global trends in distinctive ways. He argued that national conditions, capabilities and competencies are still the main factors to explain how countries can respond to external conditions.

#### Globalization: the "grand effects" thesis.

No es raro que el principal problema o debilidad de la tesis de los "grandes efectos" radique en atribuir a la globalización—como contexto de trasfondo— ser causa inmediata de una variedad de consecuencias en el campo de la educación o de la política educativa de muy disímil origen. Estar en el trasfondo no es causar algo, sin embargo. Así, por ejemplo, la descentralización educacional puede obedecer a muy diversas causas y seguir trayectorias nacionales diferentes en distintas sociedades, sin que el proceso globalizador de trasfondo tenga una incidencia relevante. Lo mismo sucede con la disminución o aumento del gasto fiscal destinado a educación, con la mayor o menor presencia de elementos competitivos en el sistema, con la privatización educacional, etc. En cada caso, lo más seguro es que el análisis empírico muestre que se trata de fenómenos que se rigen todavía, esencialmente, por lo que un autor llama la regla del "nacionalismo metodológico" (Beck 1998); esto es, que el contorno de la sociedad se considera coincidente con el del Estado nacional y sirve como "contenedor" de los determinados fenómenos que se desea explicar.

En suma, la tesis de los grandes efectos no proporciona un enfoque adecuado para evaluar las consecuencias de la globalización sobre el <u>entorno</u> en que se desenvuelve la educación y, seguidamente, para evaluar las consecuencias de los cambios en dicho entorno sobre la <u>intimidad</u> del sistema educacional; esto es, sobre los procesos de enseñanza / aprendizaje.

José Joaquin Brunner, Globalización y el futuro de la educación: Precisiones, desafíos y estrategias.

to 3 on its impact can be interpreted as meaning that the panel was undecided about their positive or negative effects.

## Economic Development, employment and education

Pedro Sáinz and Mario La Fuente, in their paper, made an effort to look at the actual prospects of economic development in the region, and at their expected impact on occupation and educational requirements.<sup>8</sup> Based on the experiences of the last twenty years, and the characteristics of the international economy today, they do not expect the region to grow very fast in **h**e next fifteen years. More specifically, they believe that economic growth will take place in specific segments of different societies, and their benefits will be limited also to some specific social groups.

<sup>&</sup>lt;sup>8</sup> Pedro Sáinz G. and Mario La Fuente R., *Crecimiento Económico, Ocupación e Ingresos en América Latina: Una Perspectiva de Largo Plazo.* 

#### Prospects for economic development in Latin America and the Caribbean

A partir de 1985, países como Costa Rica, El Salvador, Colombia, Perú y República Dominicana parecieron alcanzar hasta 1995 por algunos períodos un crecimiento estable superior al 5%. No obstante, en ese período sólo Chile tuvo éxito en mantener tasas positivas y elevadas de crecimiento fruto de un proceso de inversión estable y con creciente estabilidad de su balanza de pagos. Sólo a partir de los últimos tres años de los noventa parecieron unirse a Chile de forma más estable México, Costa Rica, República Dominicana y en un grado algo menor el resto de los países centroamericanos y algunos otros caribeños.

En estos países es posible identificar algunos focos dinámicos de inversión donde se ha gestado una acumulación estable de capital por períodos relativamente largos y que además están dando origen a exportaciones que crecen a tasas elevadas con lo que tienden a crear balanzas de pago más estables reduciendo en grado importante la vulnerabilidad externa. En el caso de Chile, parte de los focos dinámicos estaban asociados a los recursos naturales (minería, sector forestal, pesca y fruta) en tanto que en México están constituidos por parte del sector manufacturero (especialmente automotriz) la maquila, el turismo y recursos naturales (petróleo). En el caso de los países centroamericanos y caribeños, el turismo, la maquila y los recursos naturales vienen jugando un papel central. En todos estos últimos casos la migración internacional ha jugado también un papel importante al reducir en algún grado las demandas sociales, la presión sobre el empleo y a través de reembolsos desde el exterior a sus familias que alcanzan en ocasiones cifras muy significativas.

En otros países han surgido focos dinámicos pero su intensidad ha sido insuficiente. Tal es el caso, por ejemplo, de los efectos que el Mercosur gestó en especial en Argentina y en algún grado en Brasil.

A la vez, los países en que la recuperación del crecimiento se apoyó de manera sustancial en la recuperación del consumo privado, sustentado este último en importantes niveles de endeudamiento interno y externo, se gestaron a lo largo de los años noventa, situaciones de intensa vulnerabilidad externa. Ilustran esta situación las crisis de Argentina y México en 1995 y la recesión que afectó a la mayoría de los países sudamericanos en el bienio 1998-99.

Pedro Sáinz G. and Mario La Fuente R., *Crecimiento Económico, Ocupación e Ingresos en América Latina: Una Perspectiva de Largo Plazo.* 

Projected into the future, this situation means that, even in the best scenarios, economic development will be restricted to the more modern and highly capitalized sectors of the economies in specific countries, providing limited employment opportunities for highly educated persons. Such growth could have important positive effects in a country, expanding the services sector, creating internal demand, reducing poverty levels, and providing governments with more tax resources for social policies of different kinds. However, it cannot be expected to absorb highly trained persons in large quantities, and its effect on income distribution are not expected to be very significant.

This view differs from the traditional understanding coming from the "human capital" theory of education, for which education, by itself, is a productive factor, and can generate wealth. This issue is taken up by Henry Levin's paper<sup>9</sup>, which presented a survey of the development of the human capital theory since its inception, with the work of Gary Becker, to its current, more elaborate versions. What the earlier theorists of human capital found out was that countries with more educated populations were much more productive than others, and these differences in productivity and wealth could not be explained by different endowments of the traditional economic factors – capital, labor, land, raw materials. They did not look, however, on the specific ways in which education contributed to the creation of wealth. This was done more recently, as described by Levin:

Particularly in a dynamic setting where there are continuous changes in input prices and productivity, partially resulting from new technologies and market alignments, traditional methods of resource allocation may be inefficient. What abilities are needed to adjust to such disequilibria and make the firm more productive? More education and higher education, in particular, imparts in workers the abilities to master an understanding of their roles in the production process and to tacitly make adjustments to changes in the prices and productivity's of inputs. These continuous adjustments allow a return to equilibrium in the economic sense of equating costs and revenues at the margin and maximizing productivity and profits.

The important caveat, here, is the reference to a "dynamic setting", where these adjustments toward greater efficiency can take place. This setting corresponds to the dynamic and well endowed sectors of the economy mentioned by Sáinz and La Fuente, outside of which the productive effects of education seems limited.

#### Public expenditures on education

In spite of the expected inability of the economy to absorb a growing number of well-educated persons, the demand for education in the Latin American and the Caribbean region is likely to remain intense. As the population gets more educated, persons with higher qualifications replace the less educated, even if no new jobs are being created, and if the economy is not growing or changing in a significant way. This relative advantage of the more educated is a very powerful incentive for individuals, even when the social and economic benefits of educational mobility for

<sup>&</sup>lt;sup>9</sup> Henry Levin, *Pedagogical Changes for Educational Futures in Latin America and The Caribbean*.

society are negligible or even negative. This expectation of better income and more stable jobs, however, is only one part of a broader generational movement for more education, which is also part, if one wishes, of globalization. For the upper and middle sectors in all countries, to be a student is an essential part of the lifestyle of the young. For the middle sectors, there is a strong social pressure to get some kind of higher education degree, and a full secondary education is becoming an indispensable requisite for citizenship and social acceptance. For the lower social groups, education is perceived as the best channel for social mobility, job stability and higher income. All panelists agreed that education in Latin America and the Caribbean should continue to expand and improve its quality in the next decades, and several among them stressed that, more important than the adjustment of skills to the labor market are functions like spreading and maintaining social values, increasing equity, developing critical minds, and building social capital. To be educated - and, more specifically, to complete at least the first eight or nine years of basic education, and, in some cases, higher qualifications - is not perceived as a means to an end, but as a new social right which everybody is entitled to have.

This contrast between what will happen with the economy and what is expected to happen with education is made still stronger because the cost of education will to rise very significantly in the next several years, but the resources to pay for it will not be forthcoming, at least not in the expected amounts. The panelists were uncertain about whether public expenditures in education would stagnate or continue to grow, but the absence of adequate resources was perceived as the worse possible scenario for the future. The actual trend seems to be in the direction of growth in absolute and relative terms, but not enough to cover future needs. Once universal access to basic education is attained, as it has been for most countries in the region, there are growing pressures for expansion of higher levels of education - secondary, technical and higher education. In his presentation, José Pablo Arellano noted that the cost of secondary education is on average 30% higher, per capita, than the cost of basic education, and this cost is multiplied several times for higher education. To improve the quality of education at all levels, a widespread demand, is also very expensive: it requires better educated and better paid teachers, better buildings, less students per teacher, better equipment in the schools, laboratories, computer equipment, libraries. There is some space for more public expenditures for education, but not much. According to

Arellano, the countries in the region already invest about 12% of their per-capita income in education, compared with about 19% for the OECD countries (the figure for Chile is 17%). A 50% increase in per-capita expenditures on education in Latin America would bring these countries close to those with the highest levels of investment in the world. This would still not be sufficient, however, given the much smaller per-capita income in our countries. Even in the best scenario, the countries will have to choose between modest improvements in basic and secondary education and the expansion of higher education, and will not be able to do both.

#### Future expenses for education in Latin America

El gasto publico en educación en América Latina pasó de 3,9% del PIB en 1980 a 4,6% en 1997, en virtud del aumento registrado durante los 90. En los países desarrollados esta proporción permanece mas o menos constante en 5,1%.

Si se realizara un esfuerzo muy significativo por aumentar los recursos públicos destinados a la educación durante los próximos 15 años en América Latina, se podría contar con 1,5% del PIB de recursos públicos adicionales.

Las dos grandes demandas por recursos, cobertura en secundaria y superior por una parte y mejoras en la calidad de primaria y secundaria por otra, resultan imposibles de abordar simultáneamente con los recursos públicos. Duplicar la actual cobertura en educación superior y elevar en 50% la cobertura en secundaria costaría cerca de 1,5% del PIB. Un costo similar representa elevar en un 50% los recursos actualmente invertidos por alumno en la enseñanza primaria y secundaria, de modo de llevarlas a los niveles de inversión por alumno en términos de PIB per capita de los países mas desarrollados. Esta tensión entre cobertura en el nivel superior y secundario y calidad en el nivel escolar es

también una tensión con directas connotaciones en el plano de la equidad en la asignación de los recursos públicos, ya que los que se beneficiarían de la mayor calidad educativa son los mas pobres mientras que en el caso de la mejor cobertura serian los de ingresos medios y altos.

José Pablo Arellano, Financiamiento de la Educación en América Latina

#### Governability and educational reform

The panelists were uncertain, but tended to disagree, with the statement that "democracies will have difficulty establishing themselves, will replaced by populist governments or will face problems of instability". This was to be expected, since, for the first time in history, elected, civilian governments rule all countries in the region, and isolated attempts to break the constitutional order been met with strong national and international pressures. Political democracy, however, is not the same as governability. In all countries, there is a gap between what governments can provide and the growing expectations of the population, opening the way for populist politics: situations in which politicians promise more than what they can deliver, and sacrifice long-term goals for short-term political benefits and public opinion impact. For education, such situations can mean institutional instability, lack of leadership, waste of resources and financial uncertainty, all leading to the inability to carry long-term projects of educational improvement and institutional growth.

Problems of governability are often met by attempts to reduce the political and economic resources governments can handle. One way to do this is to reduce the governments' responsibilities, transferring them as much as possible to the private sector. This is the trend towards "minimum government" and privatization, which is seen sometimes as part of "globalization", but derives from a much more basic mistrust on the ability of governments to function well. Another response to the problems of governability, very common in Latin America, is to tie the government's hands through a complex set of mandatory legislation, oversight committees and supervisory bodies, with strong presence of stakeholders. A third trend is to transfer responsibility from the higher to the lower levels of government – states and municipalities - under the assumption that, the closer to the grassroots, the best the governments can function.

In short, although the forecast for democracy is not negative, there is a clear concern about the role of government in the management of education, which appears in the strong preference of the panel members for higher levels of decentralization and social participation in educational activities; it appears also in their mistrust for comprehensive projects of educational reform. Rosa Maria Torres, in her analysis of ten years of the *Education for All* initiative, pointed to the drift that occurred from the ambitious goals of a new approach to education, so strong in the 1990 Jomtien declaration, to the conventional ways in which the educational policies were carried out afterwards;<sup>10</sup> Graciela Frigerio<sup>11</sup> points to the inability of comprehensive reform projects to change the culture of the schools, a condition without which successful educational policy to exist; and Álvaro Marchesi points to the main contradictions of most current attempts at educational reform in Latin America, and the first item in his list of a desirable future is a strong commitment of government and society with educational goals; all the others are changes that have to take place at the grassroots of the educational systems.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup> Rosa Maria Torres, FUM-TEP, Una Década de Educación para todos - la tarea pendiente,

Montevideo, 2000; Editorial Popular, Madrid, 2000; Editorial Laboratorio Educativo, Caracas, 2000. <sup>11</sup> Graciela Frigerio, ¿Las reformas educativas reforman las escuelas o las escuelas reforman las *reformas*?

Álvaro Marchesi, Cambios Sociales y Cambios Educativos en Latinoamérica.

#### Current realities and desirable future for educational reform

Una realidad contradictoria:

La sociedad es más exigente con la educación pero no se compromete en la práctica con ella Los problemas educativos no tienen un origen exclusivamente educativo pero se intentan resolver sólo desde reformas educativas Los profesores han de realizar nuevas funciones pero se mantienen los esquemas tradicionales en la organización de su trabajo Las escuelas deben realizar nuevas tareas pero su modelo organizativo continúa invariable Los sistemas de evaluación deberían reflejar la realidad pluridimensional del hecho educativo pero se orientan casi exclusivamente al rendimiento académico de los alumnos. Se exige más y mejor educación pero se está perdiendo su sentido y su valor Un discurso muy avanzado frente a una realidad con enormes carencias El futuro deseable: El compromiso de los poderes públicos y de la sociedad con la educación; Un cambio en la organización y el funcionamiento de las escuelas

La necesaria implicación de los padres

Una revisión radical de la situación de los profesores

Una nueva manera de enseñar

Based on Álvaro Marchesi, Cambios Sociales y Cambios Educativos en Latinoamérica

## Education and society

There was strong consensus among the panelists that education is moving towards greater decentralization, autonomy and community participation, and that this was considered a very positive trend. Society is becoming more aware of the importance of education, and will bring more resources to it, beyond those provided by the State. Among education's positive contributions to society, two are perceived as very likely to happen, and should have a strong impact: shaping citizenship, creating a more just social order; and developing life skills; and reducing social and economy inequity. They believe that international and multilateral organizations will play a growing role, but do not expect their impact to be especially important either.

Table 2 – Education and society.		
	Probability (1, very unlikely; 5; very likely)	Impact (1, very negative; 5, very positive)
The current practices of education system organization and management will change, moving toward greater decentralization, autonomy, and community participation.	descentralización y participación descentralización y participación descentralización y participación descentralización y participación descentralización y participación descentralización y articipación descentralización y articipación d	descentralización y participación descentralización y participación descentralizació
The interests in education of different organized sectors – the business community, non-governmental organizations, unions, etc. – will grow. This will mean the introduction of more human, financial, and technological resources in education systems of all kinds.	movilización de la sociedad	movilización de la sociedad
Education will play an important role in shaping citizenship, creating a more just social order, and developing life skills in the region.	educación para a ciudadania	educación para a cludadenia
Formal education will increasingly lose its function of teaching values, and will be progressively limited to fulfill the requirements of the labor market.	valores de mercado una de mercado x: 2.666 scd:1.300	valores de mercado
International organizations – the United Nations, the World Bank, IDB - will increase their presence and influence in the shaping of national education policies in the region	popel instluciones multilaterales	papel instructores multilaterales
Education will play a very important role in reducing social inequalities within countries in the region.	education reduce designation education reduce designation education reduce designation education reduce designation exactly and the second	educación recluce designaldad
Current differences between public and private education will tend to be erased as a result of the introduction of new modalities of school financing and management – by communities, religious groups, businesses, public "voucher" systems, etc.	tusión público-privado tusión público-público-público-público-público-público-público-público-público	fusión público-privado

Educator and teacher organizations will exert increasing influence in national education policies.	sindcalización de maestros	sindicalización de maestros
	nuy ingrobable 2 3 4 muy probable sindicalización de maestros	u muy negativo 2 3 4 muy positivo sindicalización de maestros
	x:2.72 sd: 1.02	x: 3.22 sd: 1.08

#### Decentralization and local autonomy

It is difficult to decide if the panelists' prediction of a trend towards decentralization and local autonomy of schools results from an actual appraisal of what is likely to happen, or is an expression of what they would like to see in the next fifteen years. In any case, these strong expectations and preferences for decentralization and local autonomy derive from the growing skepticism about the management capabilities of central authorities, and, perhaps more important, from a growing realization that education is an activity which requires permanent creativity, leadership and initiative, and activities of this kind cannot be performed according to bureaucratic procedures and hierarchical command lines. This notion, spelled out clearly in Ana Luiza Machado's paper<sup>13</sup>, is an integral part of the "Accelerated Schools Project" described by Henry Levin on his paper, and is valid for any educational setting, regardless of its implicit pedagogical orientation. As Graciela Frigerio points out<sup>14</sup>, decentralization, in itself, may not produce the expected results, if it is just a pretext from central administrations to forsake their responsibilities, and if it is not accompanied by adequate changes in the school's culture. The expectation, however, is that more local responsibility and empowerment can be a strong incentive to create new institutional cultures, which could not be possibly handled from above or from outside.

<sup>&</sup>lt;sup>13</sup>Ana Luiza Machado, *Papel dos Gestores Educacionais num Contexto de Descentralização para a Escola*.

<sup>14</sup> Graciela Frigerio, Las reformas educativas reforman las escuelas o las escuelas reforman las reformas?

#### School decentralization

A escola que se busca com a descentralização é uma escola autônoma, aberta, flexível, democrática, participativa e que seja um espaço de socialização. Uma escola que interactue com a Comunidade escolar, onde os professores se comprometam com os resultados dos alunos, onde os pais e mães estejam presentes. Enfim, uma escola onde o aluno seja valorizado e estimulado a aprender. Onde o clima organizacional seja favorável à aprendizagem e os professores desenvolvam trabalho de equipe. Onde a curiosidade do aluno seja despertada para continuar a aprendendo e que ele receba ai as condições para tal."

Ana Luiza Machado, Papel dos Gestores Educacionais num Contexto de Descentralização para a Escola

#### School autonomy, empowerment and responsibility in the Accelerated Schools project.

Accelerated Schools are built on the active practice of three central principles:

(1) <u>Unity of purpose</u> refers to an active collaboration among parents, teachers, students, support staff, administrators, and the local community toward setting and achieving a common set of goals for the school. These shared goals and values become the focal point of everyone's efforts.

Clearly, a central element of the <u>unity of purpose</u> involves working to transform the school into an accelerated one that will make students academically able at an early date so that they can fully benefit from their further schooling experiences and adult opportunities. The all-inclusive process of defining a common purpose is extremely important in and of itself. By including all members of an educational community from the start in the planning and design, the implementation, and the evaluations of educational programs, schools can ensure more cohesive educational efforts and a greater commitment to those efforts. Unity of purpose stands in contrast to the rigidity of many national educational systems that provide little scope of discretion at the local level to set the direction of schools. However, unity of purpose must also be accompanied by the power to make decisions that will support the purpose of the school, within the broad limits established by the government on curriculum and school policy.

(2) Empowerment coupled with responsibility refers to the ability of the participants of a school community in both the school and at home to make important educational decisions, take responsibility for implementing those decisions, and take responsibility for the outcomes of those decisions. The purpose of this principle is to break the present stalemate among administrators, teachers, parents, support staff, and students in which the participants tend to blame each other as well as other factors "beyond their control" (e.g. the government) for the poor educational outcomes of students. Unless all of the major actors can be empowered to seek a common set of goals and influence the educational and social processes to realize those goals, it is unlikely that the desired improvements will take place or be sustained.

This shift from a central authority to the school requires the establishment of three sets of institutional changes that are usually not present. First, there must be an effective system of school governance that can involve and stimulate participation of all of the pertinent constituencies in an effective way. Second, since good decisions are informed-decisions, the school must adopt a method of problem-solving that addresses its challenges and provides appropriate decisions based upon a good base of information. Third, the school needs its own system of assessment to ascertain the consequences of its decisions. The development of all three of these is incorporated into the Accelerated Schools process.

(3) <u>Building on strengths</u> refers to utilizing all of the learning resources that students, parents, all school staff, and communities bring to the educational endeavor. In the quest to place blame for the lack of efficacy of schools in improving the education of students at-risk, it is easy to exaggerate weaknesses of the various participants and ignore strengths. Accelerated School communities actively look for and build upon the strengths of all students, parents, teachers, support staff, administrators, the district and the local community as they implement the Accelerated schools process and develop powerful learning experiences.

From Henry Levin, *Pedagogical Changes for Educational Futures in Latin America and The Caribbean*.

#### Diversity and multiculturalism

Related to the quest for decentralization and local autonomy is the growing concern, in Latin America and the Caribbean, for the large cultural and often linguistic differences that exist within the countries. This issue is especially relevant for the millions of native Americans that inhabit countries such as Bolivia, Peru, Ecuador, Guatemala and Paraguay, speaking their own languages, but is also relevant to minorities which were almost disappearing in countries such as Brazil, Chile and Argentina, and are now recovering their lost identities and claiming for their rights of an education related to their culture. In the past, cultural assimilation was considered desirable, and education in native languages was conceived at most as a transitional mechanism to bring the children to the cultural mainstream. Today, as argued by Luis Henrique López, the prevailing notion is to provide children with bi-lingual education, in such a way that they can, at the same time, preserve and enhance their identities, and link to the global culture.<sup>15</sup> Multicultural education has to be seen as much more than affirmative action, or a quest for cultural variety for its own sake. This point is made very forcefully by K. A. Appiah, from whom

The fundamental argument for cosmopolitanism and multiculturalism flows from this understanding of the role of society in creating the options among which the autonomous chooser chooses. The freedom to create oneself, the freedom that liberalism celebrates, requires a range of socially transmitted options from which to invent what we have come to call our identities. Our families and schools, our churches and temples, our professional associations and clubs, provide two essential elements in the toolkit of self-creation. First, they provide ready-made identities - son, lover, husband, doctor, teacher, Methodist, worker, Muslem - whose shapes are constituted by norms and expectations, stereotypes and demands, rights and obligations; second, they give us a language in which to think about these identities and with which we may shape new ones.<sup>16</sup>

There are already some important experiences in providing this type of multicultural education in the region, and the concept of how it should be provided has been well developed, as evidenced in López' paper. Paradoxically, multiculturalism, as a counterpoint to cosmopolitanism, is an important component of the globalized social agenda, and multicultural projects often receive strong international participation and involvement, with non-governmental and multi-lateral organizations

 <sup>&</sup>lt;sup>15</sup> Luis Henrique López, *La cuestión de la interculturalidad y la educación latinoamericana*.
<sup>16</sup> Kwame Antony Appiah, "Liberalism and the Plurality of Identity", in N. Cloete and others,

Knowledge, Identity and Curriculum Transformation in Africa, South Africa, Maskew Miller Longman, 1997.

reaching out to native populations, often bypassing the countries' own educational authorities and institutions. The benefits these projects can bring to the communities involved are self-evident. Less clear, however, is the ability of this approach to reach the millions of natives that remain marginal not only to the culture, but also from the resources and the social policies of their own governments.

#### Intercultural Bilingual Education

La EIB es, por lo general, una educación enraizada en la cultura de referencia inmediata de los educandos pero abierta a la incorporación de elementos y contenidos provenientes de otros horizontes culturales, incluida la propia cultura universal. Es también una educación vehiculada en un idioma amerindio y en castellano o portugués que propicia el desarrollo de la competencia comunicativa de los educandos en dos idiomas a la vez: el materno y uno segundo.

La denominación de intercultural está referida explícitamente a la dimensión cultural del proceso educativo y a un aprendizaje significativo y social y culturalmente situado; así como también a un aprendizaje que busca responder a las necesidades básicas de los educandos provenientes de sociedades étnica y culturalmente diferenciadas. La dimensión intercultural de la educación está también referida tanto a la relación curricular que se establece entre los saberes, conocimientos y valores propios o apropiados por las sociedades indígenas y aquellos desconocidos y ajenos, cuanto a la búsqueda de un diálogo y de una complementariedad permanentes entre la cultura tradicional y aquella de corte occidental, en aras de la satisfacción de las necesidades de la población indígena y de mejores condiciones de vida.

Desde esta perspectiva, se trata de una propuesta dialógica y de encuentro y complementariedad entre culturas de raigambre diferentes. Así, la EIB se convierte en mucho más que la simple enseñanza de lenguas y que una mera enseñanza en dos lenguas diferentes y está destinada a generar una transformación radical del sistema educativo en contextos en los cuales el recurso de la lengua propia da pie a una verdadera innovación en los modos de aprender y enseñar.

Luis Enrique López, La cuestión de la interculturalidad y la educación latinoamericana

#### Partnerships and privatization.

The panelists were sharply divided on whether the trend toward decentralization and local autonomy was tantamount to a trend toward the blurring of the distinction between private and public institutions. The notion that all citizens are entitled to education, and that it is the responsibility of governments to provide the necessary resources to guarantee this right of citizenship, is not under question. Demands for education, however, are large and differentiated, and public resources are and will remain scarce. There is room, therefore, to discuss the priorities in the use of public resources, and to bring other resources to bear in the provision of education for all.

In the past, this question used to be seen in terms of a tension between the expected the roles of state families and Church as the main providers of basic education, and was linked to the issues of educational freedom and the rights for laic and religious education. Today, few persons, and none of the panelists, question the right of Churches and families to provide the education they consider best for their followers and children. All agree, at the same time, that governments should remain the main provider of basic education in Latin America and the Caribbean. This task, however, should not be left to educational authorities alone, but should get all the possible support from other sectors of government and society, as stated in the 1990 Jomtien Declaration on Education for All.

Financial resources are just one reason why this broad cooperation is necessary. The involvement of different sectors of society with schools bring to them the concerns, values and attitudes of the real world, makes them more accountable to society, and the contents of their education more relevant.

#### Partnerships for education

National, regional, and local educational authorities have a unique obligation to provide basic education for all, but they cannot be expected to supply every human, financial or organizational requirement for this task. New and revitalized partnerships at all levels will be necessary: partnerships among all sub-sectors and forms of education, recognizing the special role of teachers and that of administrators and other educational personnel; partnerships between education and other government departments, including planning, finance, labour, communications, and other social sectors; partnerships between government and non-governmental organizations, the private sector, local communities, religious groups, and families.

World Declaration on Education For All, Jomtien, 1990.

Marcela Gajardo, in her paper,<sup>17</sup> draws a comprehensive view of the different sectors which are getting involved with educational issues in Latin America: they include businessmen and entrepreneurs, private foundations, grass-roots non-governmental organizations, institutions associated with Churches, parents and teachers' associations, parents' associations, community-based institutions, and many others. In some cases, they bring additional resources to public schools; in others, they create and maintain their own schools; they can have special programs, to support specific activities; and they can be involved in the management of public resources and institutions. Their work can be limited to provide help when public resources are scarce or not forthcoming; but they can be involved also in more complex and ambitious tasks, helping to shape new programs, giving special attention to less privileged and slow learning students, and shaping educational policies.

The trend toward greater participation of society in education opens the way to innovation and may bring more resources, but is subject to intense debate. For its critics, it is part of a broader trend of governments to relinquish their responsibilities, and to renounce to the values associated with public education. For others, it is a healthy and necessary movement away from bureaucracy, inefficiency and educational irrelevance.

<sup>&</sup>lt;sup>17</sup>Marcela Gajardo, *Educación, Asunto de todos?* 

#### Dilemmas associated with the mobilization of society for education

En general, podría decirse que las políticas convergen pero falta aún, sobre todo instrumentos y mecanismos, que incentiven y posibiliten la plena participación de actores distintos del gobierno en el diseño de políticas y gestión de la educación. Los canales de participación son aún reducidos, la legislación imperfecta, son escasos los incentivos para fomentar y ampliar los espacios de participación, existe desconfianza entre actores públicos y privados respecto de sus fines y estrategias y, en general, una falta de credibilidad en los privados por de parte del Estado que se conjuga, negativamente, con su imposibilidad práctica de hacerse cargo de todas las aristas de la educación y su reforma. Los más recientes cambios en la institucionalidad y gestión de los sistemas de educación y de enseñanza dan cuenta de lo anterior. Promovidos, desde la autoridad central como parte de un proceso mayor de modernización en el Estado, este ha permitido transferir responsabilidades a las administraciones y comunidades locales, las familias, los gremios y empresas sin que estas fueran, necesariamente, acompañadas de los recursos financieros y cuotas de poder necesarias para una gestión efectiva. De hecho, procesos como los de la descentralización en curso en prácticamente todos los países de América Latina han llevado consigo conflictos internos producto de quién se responsabiliza de qué, con qué competencias y con qué recursos. Nuevas medidas para incorporar a las familias al financiamiento de la educación han estado acompañadas de protestas por la negación de un derecho a estas alturas universal: el del acceso gratuito a una educación de calidad igual para toda la ciudadanía y solventada por el Estado. El manejo privado de recursos públicos, traducidos en subvenciones, "vouchers" o "bonos", financiamiento compartido o aranceles diferenciados tal como el traspaso de la administración de establecimientos escolares a asociaciones gremiales, corporaciones privadas, entidades de iglesia y particulares que administran establecimientos públicos tampoco han estado exentos de crítica. Esto, aún cuando algunas experiencias ofrecen lecciones valiosas en materia de alianzas públicoprivadas para la mejoría de la educación y la enseñanza.

Marcela Gajardo, Educación: asunto de todos?

# Culture, Civic values, social capital, equity.

The panelists expected education to play important roles in fostering civic, cultural and social values, and to help to increase social equity. The impact of these functions was deemed to be very high, and the panelists held practically unanimous views in this regard; and they do not believe that a closer approximation between schools and market will reduce its function of teaching values.

There is nothing new in the assertion that schools should foster civic, cultural social and moral values among students, a notion that has been present in all educational institutions everywhere. The specific contents of these values and cultural elements, of course, are open to contention, but our survey did not go deeper enough to allow these contentions to appear. For many panelists, this issue was often

considered as in opposition to what was perceived as a narrow view of education, concerned only with the development of marketable skills.

Traditionally, cultural values were included in the school curricula in the teaching of history, geography literature, religion and, in some cases, through special courses of "moral and civic education". The dominant perception, today, is that these courses tend to become formal and distant of the student's real life, and fail to fulfill their functions. The more recent trend is to teach these values, together with others, such as the care for the environment, non-discrimination and the prevention of contagious diseases, as "transversal subjects" which should be part of the teaching of all disciplines. This notion is present in the new official curricula in many countries, but there is no evidence that this orientation is bearing significant results.<sup>18</sup>

For many education specialists and influentials, what is important is not to teach values and culture in the traditional ways, but to develop in the students the ability to look at society from an independent and critical perspective. In this view, education should not be a one-way transmission of established knowledge, but a creative process of through which students, together with the teachers, develop their minds, and the ability to think independently, and to transform society. If schools could function according to this model, they would cease to be a mechanism for the reproduction of established social differences and hierarchy, and would become, by themselves, a powerful instrument of social change.

"Social capital" is a different concept. In a narrow sense, it is tantamount to "social skills" - the person's abilities to relate to others, to work in groups, and to deal with the public. It is possible to argue that social skills are very important for a productive and meaningful life, and that schools should give more emphasis to the development of these skills, rather than to spend all its energy in the teaching of formal knowledge which is unrelated to the students' real life situations. In a broader sense, "social capital" is related to the notion of "trust", the sharing of communal values and bonds of confidence that ties people together. It has been argued, by some

<sup>&</sup>lt;sup>18</sup>In Brazil, the National Parameters for the Curriculum (Parâmetros Curriculares Nacionais, PCN) include, as "temas transversais" for grades 1 to 4, "Ética, Meio Ambiente, Pluralidade Cultural, Saúde e Orientação Sexual"; and the same for grades 4 to 8, with the addition of "Trabalho"and "Consumo" (Parâmetros Curriculares Nacionais, <u>http://www.mec.gov.br/sef/ensfund/paramnac.shtm</u>.

authors<sup>19</sup>, that these networks of trust and confidence are as an important asset for social and economic development as capital and knowledge, and that no sustainable social and economic development can take place in societies where people mistrust each other. Important as social capital may be, it is not clear how schools can help to construct it in any definable way.

The notion that education, and specially public education, is an instrument to foster social equity, seems to be a dominant consensus, but is controversial among specialists.<sup>20</sup> Intuitively, it seems obvious that, in societies that can provide good basic education to everybody, opportunities are more evenly distributed. There is strong evidence, coming from studies in Brazil, that differences in education are the main determinant of income inequality, and that countries with low levels of education, above a given income threshold, tend to show the highest levels of income inequality<sup>21</sup>. The opposite view is that, if no new jobs and opportunities are created, education would work just as a screening device to distribute the existing opportunities according to educational credentials, which depend, in turn, on the resources the student's families can invest in their education. A larger offer of educated persons could reduce the market value of the credentials of the more educated, but would not lead, by itself, to the creation of additional wealth. When credentials are more important than effective knowledge and competence, there is no incentive to improve the learning contents of education, which remains a ritualistic and bureaucratic procedure.

<sup>&</sup>lt;sup>19</sup> The origin of the concept is attributed to Max Weber, for whom the ethic values of Protestantism created the moral fabric for rational behavior and capitalism; and by Alexis de Tocqueville, who wrote about the importance of community life and social networks. More recently, this notion was taken up by Robert D. Putnam, in his books on Italy (*Making Democracy* Work, Princeton, 1993) and the United States (*Bowling Alone: The Collapse and Revival of American Community*, Simon and Schuster, 2000). Then, it was adopted and disseminated by Francis Fukuyama, for whom "social capital is a capability that arises from the prevalence of trust in society", and is usually created and tansmitted through cultural mechanisms such as religion, tradition or historical habit". F. Fukuyama, *Trust - The Social Virtues and the Creation of Prosperity*, The Free Press, 1995.

<sup>&</sup>lt;sup>20</sup> On this issue, the specialists and influentials in the panels had different views. For specialists, the probability that education would have a positive impact on equity was not very high, 3.3 in a scale of 5 to 1; influentials, however, averaged 3.75, being therefore much more optimistic on this regard. <sup>21</sup> Picerde Deep C Picer Diverse 1 and 2 Picer Picer Diverse 2 Picer Pic

<sup>&</sup>lt;sup>21</sup> Ricardo Paes e Barros, Ricardo Henriques and Rosane Mendonça, "Education and equitable economic development", *Economica* 1, 1, 2000. Extremely poor countries, such as Bangladesh or Moçambique, with just a few hundred dollars of per capita income, do not show large income differnces in their population. Brazil and South Africa. with per capita incomes close to five thousand dollars, present the highest levels of income inequality in the Word. In general, income inequality in Latin America tends to be very high.

#### The role of international organizations

The panelists believe that international and multi-lateral organizations could have a very important impact on education in the region, but do not think this to be very likely. This is surprising, given the importance they attribute to globalization as a general process. International and multi-lateral organizations can influence education in different ways. The World Bank and the Interamerican Development Bank place education very high on their agendas, have developed studies and prepared policy papers establishing strategies and priorities, which they can support through long-term loans and technical assistance. Canada, the United States, Sweden, England, and several other developed countries have their own national agendas of international cooperation, as well as private institutions such as the Ford, McArthur and Kellogg foundations. UNESCO and other United Nations institutions have less resources to invest, and work developing studies and by trying to build consensus among national decision makers in the identification of main issues and trends, and in the diffusion of best practices. Regional meetings of educational authorities and specialists occur frequently. For small and poorer countries, international help, both technical and financial, can be crucial por their educational systems. For larger countries, it can play very significant roles in the definition of priorities, setting up standards, and focusing resources in some specific programs. In the past, international organizations tended to focus their attention education as a resource for economic development, with emphasis on skills and technical learning; today, the attention is geared towards problems of poverty, equity, empowerment and the conditions of special groups, such as women, native populations, and blacks. The effects these multiple influences are having in national systems of education, for good or for worse, are still to be analyzed.

#### Education and the job market

The relationships between education and the requirements of the job market are changing and will continue to change in the next fifteen years, but there is no clear consensus on several characteristics of this change, or on its impact. Panel members expect higher education institutions to differentiate further among academic and vocational, or technical institutions, but do not see that this trend to have a very significant impact. They tend to believe also that schools, specially at the secondary 27 level, are coming closer to the marketplace, and this will make its contents more relevant for the students. However, they are divided in terms of the possible dilemma between general knowledge, which would require increased emphasis on broad skills, and more narrow, targeted emphasis on vocational education professional skills. Many panel members commented on this issue, pointing out that these two alternatives should not be treated as mutually exclusive.<sup>22</sup>

Table 3 – Changes in education - job market relations.		
	Probability (1, very unlikely; 5, very likely)	Impact (1, very negative; 5, very positive)
There will be increasing differentiation between university preparatory institutions and those offering earlier and more practical training for the labor market.	aumento estratificación educacional	aumento estratificación educacional
The teaching of science and technology will receive greater emphasis starting in the early grades in order to better prepare students for the labor market.	mayor relevancia ed C&T	mayor relevancia ed C&T
There will be an increasingly close relationship between secondary education and the workplace, thus resolving the problem of relevance of content offered at this educational level.	educación secundaria y trabajo of the secundaria y trabajo of the secundaria y trabajo of the secundaria y trabajo educación secundaria y trabajo x: 3.33 sd: 1.04	educación secundaria y trabajo
The job markets will increasingly require general knowledge with resulting losses in relevance for professional and vocational education	concordinations generates	concernientos generales

There is no question that students who receive a broad and well rounded education, master the basic concepts of language, mathematics and science and learn

<sup>22</sup> Divonzir Gusso, in his comments, objected to the way the question was formulated in the questionnaire. For him, "a proposição deveria haver empregado o termo 'competências cognitivas e

about the past and present conditions of their society, are more likely to find good jobs, and are more likely to become informed citizens, than those who get only a narrow technical training. In practice, however, societies providing universal or quasi-universal secondary education have been unable to give the same kind of education to everybody. There are many explanations for that, from the implicit relations between "general education" and specific class or ethnic culture and values, to the unequal distribution of learning abilities in the populations. Another, simpler explanation is that students coming from poorer families need to start working earlier, and need to get the necessary training for that.

Most European countries developed dual or multiple systems of secondary education, which divide students at an earlier age and direct them either to a more academic or a more professionally oriented learning path. This diversification was compatible with the division of labor that was typical of the "Fordist" or "Taylorist" industrial era, with a relatively small strata of managers, "white collars", and a large number of specialized workers, "blue collars".

Latin American countries tried to follow similar paths, but much less successfully, because the region lacked a well-developed industrial and services sector in which the professionally trained student could find jobs and work. Indeed, the best experiences of professional and vocational training in the region were those provided directly by the business sector, such as the SENAI and SENAC systems in Brazil; but they remained limited to a small number of students.

This pattern of diversification and differentiation is being questioned today from two perspectives. First, there is the notion that professional and vocational education is incompatible with the demands of the new economy, where technologies changes all the time, the job-market is highly unstable, and most activities are knowledge-intensive, requiring broad knowledge and communication skills, rather than narrow specialties. Second, that differentiated systems are discriminatory, relegating students from technical and vocational institutions to low-prestige jobs, and curtailing their chances to advance to higher education degrees.

sociais básicas' em lugar de 'conhecimentos de tipo geral' como antinomia dos resultados da 'educação profissional e vocacional' orientada para competências técnicas específicas para os postos de trabalho.

#### Technological modernization and the new requirements for work

La modernización tecnológica, especialmente la introducción de la microelectrónica y el incremento de las comunicaciones, modifica los procesos y permite integrar actividades realizadas en diversos lugares, achicando tiempos y espacios y reduciendo el tamaño de las unidades productivas. La consecuencia para los trabajadores es una mayor necesidad de polifuncionalidad y la exigencia de gestionar procesos aún en niveles ocupacionales relativamente bajos. (...)

Este modelo aparece cada vez más como perspectiva futura y condición de viabilidad de los emprendimientos productivos de cierta dimensión, pero es aún incipiente en términos cuantitativos en la Región. Tanto las redes productivas, conjuntos de empresas en una misma línea de producción o "clusters"<sup>23</sup>, como las innovaciones tecno-productivas de última generación y la producción integrada a través de las fronteras son realidades que aparecen a lo largo y a lo ancho de la Región. Pero también existen multiplicidad de pequeñas y micro empresas con tecnologías obsoletas que subsisten en nichos aislados, así como otras que emplean trabajadores de muy baja calificación, en los últimos eslabones de las cadenas productivas, se trate de la maquila o de servicios subsidiarios (por ejemplo limpieza) de empresas de mayor nivel tecnológico. Finalmente, el sector informal aparece como el gran empleador de la Región: sin haber perdido su característica heterogeneidad, es a la vez un "refugio" de los trabajadores de baja calificación excluidos del sector formal, y cuna de microempresas a veces con alta inversión de capital humano y posibilidades de desarrollo en nuevos nichos del mercado.

María Antonia Gallart, La formación para el trabajo en América Latina- Pasado, presente, futuro.

The reality in Latin America, however, is that, first, only a small portion of the labor market follows the expected pattern of the "new economy", as shown by Maria Antonia Gallart; and second, that the mass secondary education systems which are being hastily built in many countries are unlikely to provide the kind of good quality, all-encompassing general education they are supposed to do. The OECD countries, as described by João Batista de Oliveira, are not dismantling their systems of professional and vocational education, but adapting them to the new times. One of the key explanations for their success is "contextualization" - abstract concepts and general skills are learned together with practical experience in concrete work situations, and approach that seems to work better than the formal teaching which is typical of conventional secondary schools.

<sup>&</sup>lt;sup>23</sup> Conglomerado de empresas en un mismo territorio.

#### Effects of school differentiation in developed countries

En lo que se refiere al efecto de la diferenciación curricular y estratificación del rendimiento académico y otros indicadores de desigualdad, los estudios muestran una diferencia bastante acentuada entre lo que acontece en Europa y los Estados Unidos. Ayalon y Gamoran (2000) compararon los resultados de esa diferenciación en los Estados Unidos e Israel, cuyo sistema de educación secundaria es también diversificado, y los modelos europeos. Aquel estudio documenta cómo la diversificación de la enseñanza secundaria, al estilo europeo, en la práctica contribuye a disminuir las desigualdades y a aumentar el rendimiento académico de los alumnos. Una de las explicaciones para el éxito de los modelos europeos sería el hecho que en esos países la diversificación (y contextualización) ayuda a los alumnos en riesgo y de menor background académico a dominar mejor conceptos abstractos. En los Estados Unidos la falta de una diversificación explícita, para asegurar la "igualdad formal de oportunidades", acaba resultando en curriculum inadecuados o de peor calidad para los alumnos que participan de curriculum o escuelas diversificadas.

Finalmente, desde el punto de vista de su evolución, lo que se nota en los sistemas diversificados de educación de segundo nivel de los países de la OCDE, sobretodo en Europa, son dos tendencias que definen los nuevos rumbos de la educación profesionalizante. Por un lado, esos cursos van aumentando más el tiempo, la carga horaria y el nivel de exigencia con relación a componentes conceptuales y nivel de abstracción. Por otro, esas escuelas y cursos van ampliando el objetivo de los cursos y sus aplicaciones, disminuyendo el número de especializaciones. En ninguno de aquellos países, incluyendo Estados Unidos, se nota cualquier tendencia a la extinción de los cursos técnicos, los egresos profesionalizantes o la unificación curricular. Así mismo, en los países donde las habilidades técnicas no siempre encuentran una salida directa al mercado de trabajo, en función de la reestructuración del sector productivo, las escuelas técnicas y profesionales se sienten orgullosas cuando sus alumnos se gradúan en un área y trabajan en otra – lo que para ellas es un éxito, ya que aprendieron a generalizar.

João Batista Araújo e Oliveira, Educación Media en América Latina: diversificación y equidad.

The policy recommendations that follow from the papers by Oliveira and Gallart seem straightforward. Basic skills are obviously important, and should be provided, as much and as well as possible, during the first eight or nine years of basic school. Secondary education, particularly if taught in traditional ways by ill-trained teachers for students with limited backgrounds, is not likely provide most students with the kinds of general skills which are supposed to be required by the new economy. The labor market in Latin America is not restricted to high-technology firms; it still has a large space for skilled and semi-skilled workers, and it is better to prepare the young to occupy these jobs than to lure them into an academic path from which they are very likely to drop out before reaching the expected rewards. A new emphasis technical and vocational education should be carefully distinguished from segmentation, and students should have clear mechanisms to move back and forth between different types of secondary education, and from them to higher degrees, if they so wish.

#### A proposed new model for general and professional education in Latin America

• Educación básica de calidad no sólo en la adquisición de habilidades básicas de expresión oral y escrita y matemática aplicada, sino de capacidad de resolver problemas y manejar tecnologías usuales (por ejemplo, computación). Para ello se pondrá especial énfasis en apoyar la enseñanza básica en las zonas desfavorecidas con el objetivo de aumentar la retención y la relevancia de los conocimientos.

• Atender las poblaciones de jóvenes y adultos actualmente en riesgo mediante programas focalizados, evitando la superposición, y fomentando la coordinación de esfuerzos a nivel local, provincial y nacional. Las iniciativas existentes en algunos países que contemplan alianzas del Estado Nacional con gobiernos locales e instituciones de la sociedad civil pueden ser un antecedente en esta dirección. Estos programas deben incluir mecanismos de evaluación externa permanente.

•Mantener una cantidad limitada de escuelas técnicas de calidad, posteriores a la enseñanza básica de nueve o diez años, cuyo número se adapte a las características de cada país, articuladas con las empresas, sea por sectores o por localidad, con su curriculum centralizado en procesos y no en ocupaciones, más tecnológicas que vocacionales.

•Convendría que estuvieran coordinadas con la educación tecnológica terciaria, compartiendo talleres y laboratorios, para evitar de esta manera una enseñanza de baja calidad<sup>24</sup>. Deberían ser monitoreadas mediante mecanismos de seguimiento de egresados.

•Formación profesional flexible, adaptada a diferentes usuarios y no sólo a los trabajadores en actividad. Su forma organizacional dependerá de cada país y de su pasado institucional; lo importante es que esté articulada con la educación formal, brindando oportunidades de formación más específica a los jóvenes que salen de la educación general. Es indispensable que esté basada en competencias y vinculada con las cámaras empresarias y los sindicatos para adecuarse a los nichos ocupacionales reales, y que ofrezca posibilidades de desarrollar trayectos de capacitación a sus usuarios. Estaría descentralizada, pero en este caso también se buscarían alianzas estratégicas a nivel local. El Estado tendría que proveer los servicios de apoyo de mediano y largo plazo tales como el desarrollo curricular, formación de formadores, desarrollo de material didáctico, etcétera. En este ítem, como en los anteriores, la evaluación externa y la actualización permanente de la oferta de cursos son cruciales.

•Desde el punto de vista cuantitativo, tender a que el conjunto de la población adquiera competencias de ciudadanía y empleabilidad, y a que exista un pool suficiente de personas que tengan educación técnica de fundamento, lo suficientemente general para poderse adaptar a los cambios tecnológicos. La formación profesional tendría que ser de corta y mediana duración para poder adaptarse a los cambios ocupacionales, cubriría una parte relevante de la fuerza de trabajo, permitiendo la formación permanente a lo largo de la vida.

María Antonia Gallart, La Formación para el Trabajo en América Latina: Pasado, Presente, Futuro.

<sup>&</sup>lt;sup>24</sup>El modelo sería el de la educación secundaria tecnológica, implementado en Estados Unidos ("tech prep") o en Francia ("enseignement technologique"), adaptado a las realidades institucionales de América Latina.

#### Science education and the new economy

One issue that cuts across the questions of market demands and school differentiation is the intensity and nature of science education that students should receive. Jorge Allende, on his paper on the current impact of the developments of science in society, expresses his concern for the high levels of scientific illiteracy in modern societies, and makes a plea for more for efforts to close this gap. For him,

El aprendizaje de las ciencias tiene que iniciarse desde los primeros años de escolaridad. Es fundamental que los niños aprendan el enfoque de exploración, del juego experimental en que tratamos de contestar preguntas sobre el hombre y el universo, no memorizando las respuestas, sino buscando contestaciones con simples herramientas que manipulamos con nuestras propias manos. Esta metódica esta plenamente de acuerdo con los postulados de la reforma educacional en que se le otorga la mayor importancia a la actividad del educando versus el discurso del docente. Es importante que nuestros niños experimenten tempranamente el gozo del descubrimiento y que aprendan la fascinación de la ciencia. El método científico tiene además muchos valores formativos cono la sana crítica, la rigurosidad en el sacar conclusiones y el absoluto respeto por la verdad. Los niños que han conocido a la ciencia y a los científicos desde sus primeros años serán ciudadanos que se interesaran por la ciencia y valoraran la labor que hacen los científicos.<sup>25</sup>

His concern is not with the narrow functionality of scientific and technological education for the job market, but with science as a central component of modern Western culture, based on the appreciation of facts, methodical doubt and rationality. In part, his concern coincides with that of many other authors who write about the need to make education more creative, more meaningful to the student, and less based on rote learning and routine work. In that sense, the problems of science education are not different from those of the "other culture", the humanities, which is also taught in most of our schools in ways that are meaningless to most students and to a large portion of the teachers themselves.

The scientific. and humanistic illiteracy of students and teachers is related, no doubt, to the fact that formal education is becoming universal, and cannot be restrained to the intellectual cannons of what used to be considered a proper humanistic or scientific upbringing. The question is not just of poor education, but of different ways of understanding what the proper contents of an education should be. Writing for an South African audience, Peter Scott, the Vice-Chancellor of Kingston

<sup>&</sup>lt;sup>25</sup> Jorge E. Allende, *El impacto del avance de las ciencias sobre la sociedad en las primeras decadas del siglo XXI .El contexto para la educación.* 

University in England, noted that two phenomena have reshaped, in recent years, the intellectual culture of the West. One was the intellectual criticism of modernism and its implications. "A frontier has been crossed between the 'modern' system organized, for all its restlessness, around universal values and 'unified subjects', and *posthistoire*, the trackless territory of deconstructed meanings, relative values, fleeting truths". The second phenomenon was massification of higher education. "As the social constituency of higher education has been extended to new kinds of students that lack the academic and cultural references instinctively understood by their élite predecessors and, subsequently, entire populations have been drawn into a scientific culture (however dilute, new subjects, new patterns of teaching, new forms of research have developed to fit these new social 'facts'". He concludes by saying that, "in terms of its cognitive values the intellectual culture of the West is more open and less sure, and this openness and these doubts are epistemological as well as substantive. And, in terms of its social practices, in the processes of institutionalization and professionalization, similar novelties can be observed".<sup>26</sup>

The conclusion is not that the intellectual and cultural assumptions of Western modern societies have lost their value, but that there may be different ways of learning about the is relevant and important for our societies, regarding contents and the ways these contents are spread and appropriate. Peter Scott concludes his presentation saying that

The globalization of science and technology does not imply a universal science and technology impervious to local variation, but the opposite, a socially distributed (and democratic?) knowledge production system that fully reflects national, ethnic, class, economic and cultural differences. In other words, the presence of global competition cannot be used as an excuse to abolish these differences. Globalization is about the incorporation of 'interior' spaces, previously untouched by elite culture and "objective" science, as much as (or more than?) competition for "exterior" spaces, in terms of world markets for science and technology, goods and services.<sup>27</sup>

<sup>&</sup>lt;sup>26</sup> Peter Scott, "Changes in knowledge production and dissemination in a context of globalization", in N. Cloete and others, editors, *Knowledge, Identity and Curriculum Transformation in Africa*, Maskew Miller Longman, 1997, pp. 23-24.

<sup>&</sup>lt;sup>27</sup> P. 40.

# Changes in the organization and functioning of educational institutions and practices.

## Scope and coverage

Several questions in the survey addressed issues related to possible changes in the scope an coverage provided by education in the region. Will early childhood education continue to expand? What will happen with life-long, continuous education? Can we expect changes in the way education is provided in society, through formal schooling?

Table 4 - Changes in scope and coverage of educational institutions.		
	Probability (1, very unlikely; 5, very likely)	Impact (1, very negative; 5, very positive)
Progressive universalization of early education programs will significantly improve basic and secondary education.	universalización de la educación inicial universalización de la educación de la educación inicial universalización de la educación	universalización de la educación inicial universalización de la educación inicial universalización de la educación inicial universalización de la educación inicial universalización de la educación inicial x: 4.42 sd: 0.87
Other forms of learning and education delivery - distance, on-the-job, new technologies – will progressively reduce the relevance of systems of formal education	educación no formal educación no formal educación no formal educación no formal seguentian seguentian x:3.26 sd''1.05	educación no formal
Current education systems will lose importance due to new forms of "continuing education" and "life-skills education".	educación continuada uga uga uga uga uga uga uga ug	educación continuada educación continuada educación continuada educación continuada educación continuada x: 3.32 sd: 1.04

One of the statements of the 1990 Jomtien declaration was that "Education starts at birth", and that early childhood education should be provided "through arrangements involving families, communities or institutional programmes, as appropriate." Several Latin American and Caribbean countries experienced a very significant growth in early childhood education enrollments in the last several years; the panelists predict that this trend will continue, and believe that this expansion will have a very positive impact in the region.

The notion that early childhood care and education, when properly done, can be an important factor in the students' achievements of disadvantaged children seems to be well established, specially when education it is part of a broader program of child care and support. Robert Myers, who did an evaluation of early childhood education in Latin America for the *Education for All* initiative, believes on its importance, but is very critical about what has happened in Latin America in recent years:

Because programming for ECCD (Early Childhood Care and Development) is at an early stage in many countries, it is possible to construct programmes in innovative ways, taking into account differing conditions, seeking convergence, and involving local communities in the process. This implies a need to move slowly, to experiment and reinvent, to build collaborative enterprises, to nurture, to support a variety of initiatives and to build capacity. Unfortunately, these needs run counter to social and political desires to move quickly so that as many people as possible are served. They run counter to bureaucratic desires to simplify administration by providing the same service to all and to avoid collaboration across sectoral lines. And they run counter to the characteristics of many international organizations where promotion and success is equated with the numbers of children and families served, with the ability to promote the particular doctrine of the agency, and/or with the ability to move money. The quantitative focus and a sense of urgency inhibits developing quality programmes, current rhetoric notwithstanding.<sup>28</sup>

This comment could be applied also to the quantitative expansion of basic and secondary, which led most countries to extend the number of years required for students to get their first education degrees, without any assurance that this extension would be related to a corresponding increase in the acquisition of knowledge and skills.

The strong support given by panelist to the extension of formal education to the early years contrasts with their limited support to two propositions about a future in which the current school systems would start to lose their importance, to the benefit of other forms of education - done at distance, on the job, computer assisted, and regardless of age - provided by persons and institutions outside the school systems,

<sup>&</sup>lt;sup>28</sup> Robert G. Myers, *Early childhood care and development*, a paper prepared for presentation at The Education For All (EFA) regional meeting Santo Domingo, February 10, 2000
### Life-long learning for all

The new idea underpinning 'lifelong learning for all' goes beyond providing a second or third chance for adults and proposes that everyone should be able, motivated and actively encouraged to learn throughout life. This view of learning embraces individual and social developments of all kind and in all settings—formally, in schools, vocational, tertiary and adult education institutions, and non-formally, at home, at work, and in the community. The approach is system-wide; it focuses on the standards of knowledge and skills needed by all, regardless of age. [...] As such, it is geared to serve several objectives: to foster personal development, including the use of time outside of work (including in retirement); to strengthen democratic values; to cultivate community life; to maintain social cohesion; and to promote innovation, productivity and economic growth.

OECD (1996) Lifelong Learning for All; Paris: OECD. Quoted by José Joaquin Brunner, Globalización y el futuro de la educación: precisiones, desafíos y estrategias.

and independently from formally established curricula, exams and teaching sequences. Although the panelist recognize the difficulties - financial, administrative, cultural - in making the current systems of formal education to work better, they seem reluctant to embrace a more radical view of a knowledge society of the future, such as the one described, among others, by recent OECD documents.<sup>29</sup>

# The impact of new technologies

The panelists expected the new information technologies to have a positive effect in the functioning of schools and in the provision of education, both for teachers and for students, but did not expect it to play an important role in reducing social differences, and do not believe that it will help poorer countries to move ahead faster and to close the educational gap.

<sup>&</sup>lt;sup>29</sup> See also, for an extended discussion of life-long learning, the paper of José Joaquin Brunner, *Globalización y el futuro de la educación: tendencias, desafíos, estrategias.* 

Table 5 - The impacts of new technologies							
	Probability (1, very unlikely; 5, very likely)	Impact (1, very negative; 5, very positive)					
New communication technologies will make current forms of school organization obsolete, reducing costs, giving teachers and students access to improved content, and making education more relevant in peoples' lives.	nuevas tecnologias nuevas tecnologias nuevas tecnologias nuevas tecnologias x: 3.46 sd: 1,04						
New technologies will help reduce education differences between rural and urban populations.	reducción de diferencias campo-ciudad	reducción de diferencias campo-ciudad					
New education technologies will allow the poorest countries that currently suffer from poor education coverage and quality to advance rapidly, arriving at the same level as the other countries.	salto por la tecnología	salto por la tecnología					

In his paper, Brunner presents a powerful view of expected impact of the new information and computer technologies (NICT) on education, which may change it in profound ways, through life learning, distance education, distributed learning and the institutionalization of networks. These technologies, because of their rapidly decreasing costs and growing capabilities, can be a powerful instrument for less developed countries to move faster, and at lower costs, in meeting the educational challenges of the 21<sup>st</sup> century. Leon Trahtemberg gives a picture of what one could expect from a "school of the 21<sup>st</sup> Century": students will learn about computers and communications, and use them as support for all learning activities; they will work with much more independence, with different combinations of individual and teamwork; the barriers between school and society will disappear; each student will follow his own rhythm of study and learning; and interdisciplinary and practical learning will be the rule, rather than the exception.<sup>30</sup>

Funcionalidades tecnológicas y usos de las NTIC aplicadas a la educación						
Funcionalidad	Usos					
Recurso de información (contenidos digitales)	Proporcionar acceso e información para apoyar procesos de aprendizaje (WWW—sitios y portales especializados), CD Roms interactivos, hipermedia, próximamente libros electrónicos)					
Instrumento de comunicación	Facilitar el aprendizaje colaborativo, interactivo y distribuido (conferencias asincrónicas y sincrónicas, teleaprendizaje, formación de comunidades de aprendizaje y redes de conocimiento) (Comunicación mediante lenguaje natural en dominios restringidos y con vocabulario determinado)					
Contextualización de contenidos	Situar el material de aprendizaje en contextos educacionalmente ricos (que operen como "anclas", por ejemplo, situaciones de <i>problem-based learning</i> estilo sala de clase de la NASA o "simulaciones" del estilo CGVR donde se genera una realidad virtual que envuelve al alumno y lo hace operar como si estuviese en una situación real. Se estima que en 5 a 7 años estarán accesibles "microworlds"					
Kit de construcción	Proporcionar herramientas—como editores HTML o VRML—que permitan al alumno construir /entender fenómenos complejos ( <i>software</i> para modelación tridimensional, diseños arquitectónicos)					
Instrumentos de visualización / manipulación	Presentar fenómenos para su análisis y manipulación (instrumentos de visualización como mapas, presentación gráfica de grandes cantidades de datos y de manipulación como simulaciones-basadas-en-modelos, del estilo de SimCity.					
Funciones de apoyo tutoría virtual para alumnos	Identificar patrones de performance sub-óptima mediante "cognitive audit trails" y prestación de apoyo tutorial "inteligente" para mejorar el desempeño en dominios delimitados. En 5 a 7 años: agentes computacionales semi- inteligentes instalados en aplicaciones que apoyan acciones definidas por el usuario. En 7 a 10 años: "sensores de conciencia" que operan con input de <i>biofeedback</i> del usuario al computador, facilitando un monitoreo de estados de ánimo					
José Joaquin Brunner, Globali. estrategias.	zación y el futuro de la educación: tendencias, desafíos,					

The passage from the current, traditional education into the "school of the 21<sup>st</sup> Century," however, is not unproblematic. The new information and computer technologies are very rapid, efficient and productive when they work, but require a very complex infrastructure that is usually not present in the poorest regions: stable supply of electricity, good quality telephone lines, readily available technical assistance, and local competence to set up the equipment, install the software, establish and man the networks. Besides, to use a computer can be seen as an

<sup>&</sup>lt;sup>30</sup> Leon Trahtemberg, *El impacto previsible de las nuevas tecnologías en la enseñanza y organización escolar.* 

awesome challenge for the non-initiated. The expectation is that, as the technology matures, it can become cheaper, user-friendlier, and less demanding in terms of infrastructure and support. Computers could become as accessible and transparent for the user as TV sets and refrigerators. It is possible to spot some trends in this direction, but there are powerful opposite trends as well: an intense competition of suppliers to provide richer and more complex services, with the use complex databanks and search mechanisms, images, movies and more demanding long distance, real-time interactions. On one hand, computer and Internet usage continue to expand at very high rates, with rapidly decreasing costs per unit, suggesting that in a few years they will be come universal. At the same time, the requirements of infrastructure and tacit knowledge for their usage are also growing, suggesting that a "digital gap" may be emerging among a minority that can put the new technologies to good use and a large majority who cannot.

To have the equipment and access to the networks, however, is not enough: the next step is to make sure that the contents that are available to the students are appropriate, and that these contents can actually reach the students in a meaningful way. An essential link in this process is the schoolteacher. The new computer and information technologies can be very useful to provide teachers and students with first-rate pedagogical materials, compensating for the teacher's pedagogical limitations. However, the students will not learn how to go after the available learning materials if the teacher is not at his side to provide a model and help him in this task.

The potential benefits of the new information and computer technologies for education in the region can be harnessed, but cannot be taken for granted. To have the desired impact, they require careful and long-term investments in infrastructure, adequate decisions in the choice of technologies, very significant investments in the development of appropriate teaching materials, and intense work to convince and enable the teachers to take up their new roles. In this process, public school systems will be subject to intense pressure and competition. If they fail to adapt to the new times, they will be perceived as obsolete and irrelevant, and lose recognition and prestige regarding the new information and education providers. If they succeed, however, they can finally get the instruments they need to fulfill their historical mandate to provide good quality and relevant education for all.

### The role of teachers in the School of the 21<sup>st</sup> Century

Enseñar un curso en red es muy diferente que hacerlo en una forma tradicional. Requiere que los profesores trabajen más duro para alentar interacciones sustantivas entre participantes. Deben monitorear y modelar las discusiones on line, y animar a los alumnos a que respondan uno al otro en su trabajo. Eso requiere de los profesores pasarse el día contestando preguntas, monitoreando discusiones, retroalimentando. Todo el tiempo deben ser facilitadores, de otro modo, los alumnos pueden fácilmente distraerse o volverse apáticos. Esto les exige entrar a la línea varias veces al día, leer las anotaciones de sus alumnos y contestarlas, sin contar la corrección de tareas y la revisión de los trabajos individuales o grupales que también requiere tiempo.

Esto significa dedicar cuatro veces más tiempo del que dedicarían en las clases convencionales, sin contar con todo el tiempo de capacitaciones que tienen que invertir para estar aptos para manejar estos cursos. Además, los profesores deben trabajar con las dimensiones afectivas de la enseñanza, que se suelen pasar por alto cuando se sobrestima el valor de la informática en la educación.

León Trahtemberg, El impacto previsible de las nuevas tecnologías en la enseñanza y organización escolar.

### Dealing with the quality of education

Two questions in the Delphi survey addressed issues related with policies aimed to improve the quality of education, one related to the quantitative assessment of student and teacher competence, and another related to the teaching profession. The panelists saw a trend toward a larger use of quantitative assessments of competence and achievement, and were divided about their positive or negative impacts. They expected some changes to take place in the teaching profession, but were also divided about their consequences. Two other issues related to the content of education were discussed in the workshop, multi-cultural education and the relationships between basic and higher education.

### Quantitative assessments

Table 6 - quantitative assessments.		
	Probability (1, very unlikely; 5, very likely)	Impact (1, very negative; 5, very positive)
Quantitative assessment of student and teacher achievement will be the major reference mechanisms used to guide government education policies.	valuación cuantitativa un production de la constructiva un productiva un productiva x: 3.78 sd: 0.99	evaluación cuantitativa evaluación cuantitativa evaluación cuantitativa evaluación cuantitativa evaluación cuantitativa evaluación cuantitativa evaluación secondaria secondaria x: 3.35 sd: 1.15

Assessments are part of the daily life of education institutions, but the quest for quantifiable standards and comparative measurements is relatively new. As the trend for decentralization and local autonomy increases, the need to make an independent assessment of what the students are learning, and, by implication, to learn what are the good learning experiences to be followed, and the bad ones to be avoided, becomes paramount. In the last decade, most countries in the region created some system for the assessment of the performance of their students, and, as the first results are emerging, there is a growing debate about the meanings and uses of these methodologies.

In her paper, Patricia Arregui identifies the important goals these assessments are supposed to meet, and then proceeds to a detailed criticism of the recent experience in the region. There are indeed many problems, some technical, some political.

# Finalidades diversas que pueden perseguir los sistemas de evaluación de logros de aprendizaje escolar

Informar a la opinión pública y generar una cultura social de la evaluación.

Contribuir a la generación de conocimiento, proporcionando insumos para la investigación aplicada sobre el funcionamiento de los sistemas educativos, las prácticas de enseñanza, el impacto de las variables sociales sobre el aprendizaje de los niños (también identificar los factores determinantes del logro) y los tipos de intervenciones más efectivos para mejorar los aprendizajes.

Construir un "mapa de situación" del sistema educativo con el fin de identificar áreas o unidades prioritarias de intervención y tipos de intervenciones necesarias, de manera de garantizar igualdad de oportunidades de aprendizaje y focalizar consecuentemente los recursos.

Comunicar valores y expectativas de logros.

Motivar mejoras y logros vía la comparación, competencia o emulación.

Alertar a la opinión pública sobre deficiencias en los resultados de los sistemas educativos y la necesidad de que se apoye intervenciones para su mejoramiento.

Identificar metas claras, mensurables y comunicables, centradas en los aprendizajes, para los esfuerzos de mejoramiento del sistema educativo, que faciliten la movilización y apoyo de la opinión pública y otros responsables.

Devolver información a las escuelas y maestros para que éstos examinen en detalle los resultados de su trabajo y mejoren sus prácticas pedagógicas

Brindar a los padres de familia información que les permita evaluar y controlar la calidad de las escuelas.

Contribuir a establecer (o monitorear logro de) estándares de calidad para el sistema educativo.

Certificar el dominio de un núcleo de conocimientos y capacidades o competencias por parte de los alumnos que finalizan un determinado nivel de enseñanza.

Seleccionar u ordenar a los estudiantes (o a escuelas o jurisdicciones) para acreditar su elegibilidad para ciertos privilegios, acceso a programas o, incluso, sanciones.

Evaluar el impacto de políticas, innovaciones o programas específicos.

Retroalimentar el currículo y los planes de estudio.

Realizar estudios de tipo costo-beneficio, que orienten las decisiones para una distribución más eficiente y efectiva de recursos siempre escasos.

Contar con argumentos persuasivos para obtener mayores recursos del presupuesto público o proponer cambios en orientaciones generales del sistema educativo.

Demostrar el peso del factor docente en los aprendizajes e influir en la formación, capacitación y desempeño de los maestros.

Evaluar la productividad de los maestros a los efectos de establecer un sistema adecuado de incentivos.

Promover una responsabilización efectiva de todos o algunos de los actores involucrados en los procesos educativos, incluyendo a los propios alumnos.

Patricia Arregui, Sistemas de determinación y evaluación de metas de logros de aprendizaje escolar como instrumentos para mejorar la calidad, la equidad y la responsabilización en los procesos educativos en América Latina.

Most of the existing assessments are "norm oriented", rather than "criteria oriented". They try to measure how much the students have learned from what is prescribed in the existing norms of each country - course programs, national curricula - and not what they actually know in terms of a well-defined and independent set of standards. If the norms are bureaucratic, based on rote learning, or just plain wrong, this is what the assessments will measure. Students and schools, or educational districts, can be ranked according to these norms, but it has been difficult or impossible to compare results to say whether what they know at a given stage is appropriate or not in terms of what is desirable or needed.

To compensate for this limitation, several countries have decided to participate in international comparative assessments, promoted by different international organizations.<sup>31</sup> These studies tend to suffer from serious problems of sampling, making it difficult to compare results. However, the general trend, both for the national and the international assessments, is that students in Latin American countries are usually well below what it expected from them at each educational level.

Politically, these assessments lack internal consensus, and governments tend to be reluctant to publish results when they are not favorable, as it happens so often. Ideally, countries should build consensus on the standards they wood like to have for their children, and the educational community should be confident that these standards are reflected in the assessment instruments. This is not an easy task, given the complex technicalities of standards setting and testing, and the opposition these assessments receive from some segments of the educational community. Part of this opposition is conceptual: some schools of thought in pedagogy reject the validity of statistical measurements, or are afraid of what they can mean as imposition of specific contents and orientations on the educational systems. Part is just corporatist selfprotection: assessment results can be used for the indirect evaluation of teachers and

<sup>&</sup>lt;sup>31</sup> "Prueba del Laboratorio Latinoamericano de Evaluación de la Calidad Educativa de la Oficina Regional de la UNESCO, en matemáticas y lenguaje; PISA: Programme for International Student Assessment de la OECD, en matemáticas, ciencias y lenguaje; TIMSS, TIMSS-R: International Trends in Mathematics and Science Study (antes Tercer Estudio Internacional de Matemáticas y Ciencias) de la IEA; RLS, PIRLS: Prueba Internacional de Comprensión Lectora de la IEA; CES: Estudio sobre Educación Cívica de la IEA" (Arregui, p. 11)

school principals, exposing problems, difficulties and limitations that remain hidden when no reliable information on results exists.

The case for quantative assessments suffers also from the inability of most governments to make good use of the results they are getting. The sheer publication of assessment results can be a powerful element to stimulate competition for better results, as it is the case, for instance, for the assessment of graduating students from higher education course programs by the Brazilian Ministry of Education. However, the best practice would be to use assessments to identify problems affecting specific areas, institutions or learning subjects, and to couple them with well-devised instruments to correct the problem.

The use of quantitative assessment may be driven also by international trends related to globalization. If a international firm wanted to get established in a specific country in the region, or in region within a country, it may well look at the achievement tests of the schools in the area, to learn about their chances to get competent employees; they can also look at the reputation of the higher education institutions, to recruit their higher management and technical staff. Good and reliable assessments may be an important relative advantage in the attraction of external investments. This could lead specific regions or institutions to look for internationally accepted evaluations, rather than local and still unknown procedures. As Patricia Arregui puts it,

Se pronunciará la tendencia hacia una mayor segmentación de "mercados evaluativos", con consecuencias en lo que se refiere a la equidad en las oportunidades de aprendizaje. Muchas escuelas e instituciones de educación superior privadas de elite se someterán a sistemas internacionales tipo Bachillerato Internacional o las que puedan producir y administrar directamente instituciones como ETS, con criterios o estándares internacionales de logros de aprendizaje, mientras que la mayoría de las escuelas públicas serían sujetos de evaluaciones referidas a criterios más localistas y de menor nivel de expectativas o exigencias.

# The teaching profession

Without competent and motivated teachers, no new technologies could be of much help, and no educational reform can succeed. What will happen with the teaching profession in the next fifteen years? And what can be done about it?



There is a widespread notion that school teachers in most countries in Latin America and the Caribbean are extremely ill-paid and ill-prepared for their tasks; and that this situation is getting worse, because of the growing budget limitations and lack of priority given to education by governments in a context of budgetary restrictions. This notion comes from the fact that the social prestige attributed to the teaching profession today is usually lower than what it was in the past, and to be a schoolteacher is seldom a career of choice for young persons who have access to higher education. The evidence of the limited qualification of schoolteachers comes from the poor achievement of so many students, although this could be explained also by other factors, related to the students' social conditions, the school environment and the absence of appropriate books and other school materials.

Brazil, with high internal differences, may be typical of the region as a whole. The 1999 National Household Survey (PNAD), found about 2,200 thousand teachers in basic and secondary education. Of those, 41% teach only in four-year (elementary) schools. They are predominantly female (71%, but 93% of those working only in elementary education, and 99% of those working in pre-school), and have held their jobs for 7 or 8 years on average. Their earnings depend much more on the education the teachers have than on the kind of work they do. Teachers in schools with only the elementary level usually do not have more than secondary education, work for small municipalities, and their earnings are low. Teachers working in full basic education schools tend to work for state governments, are much more likely to have a higher education degree, particularly in the Southern states, and their earnings are more substantial. Teachers working in secondary education usually have a higher education degree, and their earnings are the highest, close to the earnings of specialists in pedagogic orientation with similar education. For each level of education, earnings of teachers are lower than those of the population<sup>32</sup>

	Brazil - Ea	Brazil - Earnings of teachers and educators, by main levels of education and type of acitivity level of education								
	elementary education		fundamental		secondary		higher education		total	
type of activity or place										
of teaching	income	# of persons	income	# of persons	income	# of persons	income	# of persons	income	# of persons
secondary schools			209,62	1.474	439,79	17.678	1137,38	224.585	1098,57	261.87
basic schools (1-8)			435,68	1.174	454,08	119.599	962,08	273.094	808,94	419.440
elementary schools (1-4)	157,99	9.704	184,99	26.666	361,82	440.140	814,11	204.078	492,86	733.02
pre-school	175,00	824	260,73	8.690	311,58	83.019	901,41	26.852	451,42	123.82
other teaching activities	451,10	10.583	525,40	21.169	549,46	60.505	1088,28	27.164	656,49	147.37
pedagogic orientation	544,88	4.184	496,20	4.233	472,44	17.487	1278,97	73.321	1065,98	105.959
non-educational activities	401,66	10.349.491	331,33	18.118.885	614,37	9.899.020	2039,58	4.263.456	610,92	46.728.20
Total	401,52	10.374.786	331,34	18.182.291	598,86	10.637.448	1870,87	5.092.550	614,21	48.519.70

This combination of relatively low income and public employment may help to explain why teachers in the Latin American and the Caribbean region tend to be strongly unionized ad vocal in the defense of their interests, which they present as coinciding with the best interests of education as a whole. One could expect that, as their organized movement gets stronger, they could improve their salaries and working conditions, become more motivated, invest more in their own education, and benefit the students as a consequence. However, the panelists in our survey did not expect the unions of teachers and education employees to play a significant role in the near future, and did not believe that such role would have a very significant impact. This perception is probably related to the fact that the teachers' unions, while acting in defense of their needs, have often resisted projects of educational reform, which they tend to consider as threats to public education and to their professional standing. The current trends of educational reform in Latin America, for good or worse, are coming from outside the schools - governments, entrepreneurs, international organizations, non-governmental organizations, social movements - and it is not surprising that the unions perceive them as threats, rather than as opportunities.

<sup>&</sup>lt;sup>32</sup> This table includes only persons between 18 and 65 years of age which reported some earning in the household survey. Earnings refer to all sources of income, taking into account the fact that many schoolteachers work in more than one shift, or more than one place, and can have two or more jobs.

Another explanation for the limitations of the teacher movements is that they usually do not include those in the worse conditions, in small elementary schools scattered in the rural areas and small towns. In most countries, unions are stronger among best educated teachers working for central or state governments, and the benefits they eventually get from their actions tend to be related to salaries and fringe benefits, and do not spread out to those with higher needs.

The long-term strategy of most governments, and most teachers as well, is to improve the levels of formal education for all. In the past, a secondary-level teaching school was considered a socially acceptable qualification for middle-class girls, and they had no trouble teaching reading and writing skills to young children, together with some basic facts, values and attitudes. Today, most countries, including Brazil, require a higher education degree for teaching at all levels. This requirement, together with the strong and immediate benefits associated with a higher education credential, is creating a very strong demand for higher education degrees, which are not necessarily related to actual improvement in the teachers' professional performance. In 1998, there were 168 thousand students enrolled in schools of education in Brazil, 80% of which in evening, private schools. Several hundred thousand more were enrolled in courses of "letters" and "sciences" in similar institutions.

The concern about the quality of higher education the teachers are having has led the Brazilian National Education council to approve the creation of a new course program, the "curso normal superior", which exists so far only on paper. Ernesto Schiefelbein, in is paper, has presented a model of "learning workshop" which as the potential of moving away from the traditions of formal and bureaucratic teaching, as well as from the excesses of "creative" education which has been so fashionable in recent years. Valid as these proposals may be, the main problem is not to devise an ideal course program, but to provide proper qualifications to hundreds of thousands of present and future teachers who come usually from families with limited cultural resources, and cannot afford to attend the best institutions of higher learning, where the most innovative pedagogical experiences are likely to take place<sup>33</sup>.

<sup>&</sup>lt;sup>33</sup> Cuatro años después de Jomtien, un estudio sobre la calidad de la educación, desarrollo, equidad y pobreza en la Región, auspiciado por la Oficina Regional de Educación para América Latina y el Caribe de la UNESCO concluía que a pesar de la existencia de experiencias en la Región para renovar

### Constructivism and the myth of the "creative" teacher

El "mito" del profesor creador representa una tarea imposible que genera tensiones y deteriora la salud mental de los maestros; implica superar a creadores tan productivos como un Mozart o un Neruda. Conviene recordar que no existe un mito similar en Música (donde los compositores nos han legado las partituras), ni en Medicina (donde el conocimiento se acumula, por ejemplo, en Manuales de Cirugía), ni en Teatro (que ocupa los libretos preparados por escritores de renombre), ni en Ballet (gracias a las coreografías acumuladas a través de los años), ni en Derecho (donde existen códigos y jurisprudencia) o en Administración (donde se dispone de casos y simulaciones) En cada una de estas profesiones hubo un 1 a 5% de sus mejores representantes, dotados de especiales capacidades de creación, que ampliaron ese legado. Lo mismo debe ocurrir en educación.

Ernesto Schiefelbein, Relaciones de la Educación Superior con la Educación Secundaria: transformación de la enseñanza, investigación y extensión universitarias.

A popular response to the problems of teacher qualification is to provide them with short term, training courses. For the teacher, these courses can be an opportunity to get away from his working routine, and the certificate he receives may qualify him for a pay raise or a promotion. For state and municipal secretaries of education, is a demonstration of concern with the quality of education, and improves their standing with the teachers. There is thriving industry of teacher training, with specialized firms selling their services to educational agencies. Evaluations of these courses are usually limited to ask the participants themselves about their assessment, and, not surprisingly, they are almost routinely very positive.

A possible strategy for the short run is to provide the teachers with good quality teaching materials, through the use of distance learning technologies, coupled with permanent assessment of results for the students, and procedures to help the teacher and the student when the expected results are not forthcoming. The Telecurso 2000, a collection of carefully prepared TV courses developed by the Fundação Roberto Marinho in Brazil (Globo Network) is being adopted by many public and private education administrations in Brazil as a way to make sure that the students have access to good quality content, compensating for the limitations in teacher qualifications. Those who believe in the virtues of constructivism, and worry about the devaluation of the teacher's work, resist this provision of ready-made contents.

los procesos pedagógicos, no habían cambios significativos en la calidad del aprendizaje y en la formación docente. En esta valoración se insinuaban ya dos indicadores que han ido tomando relevancia en los debates sobre la evaluación de la calidad en los procesos pedagógicos en la Región: los resultados de aprendizaje e el desempeño docente'. María Amelia Palacios, *La educación en América Latina: cambios en los procesos pedagógicos*, p.4

The teacher's role, however, as argued by León Trahtemberg in his paper, remains crucial, but changes its character. The teachers' task becomes less the simple transmission of knowledge, and more that of a broker between the student and the wealth of information that is reaching him. The Internet, as it becomes more efficient and readily available, can represent a further step in this line, since it allows for two-way communication between the producer of contents and the teachers, as well as among themselves, and provide them with an opportunity to search for different contents. The Chilean Internet Educativa<sup>34</sup> was conceived with this purpose in mind, and, as its contents improve, and the teachers get more involved, it is a very important experiment to be followed. As the teachers get involved in these content-rich and technologically powerful experiments, they are likely to get more interested, and to learn further. At the end, the important choices are not between "ready-made" vs. "creative" methodologies, but between contents that meaningless and irrelevant for teachers and students, and contents that are meaningful and alive.

The survey included also a question about eventual changes in the teaching profession as a consequence of the new technologies and information age. The panel agreed that there was a tendency in this direction, but was divided about the positive or negative consequences of this trend. A corollary of the low prestige and earnings of the teaching profession is that there are not enough teachers being trained to respond to the expected growth in enrollments in secondary education in most countries in the region. A rough estimation done in 1988 was that Brazil needs to graduate about 230 thousand teachers yearly, but is not graduating more than 80 thousand, and it is not clear that all of these will actually work as teachers. Besides, there are clear and worrying deficits of teachers in specific areas, of such as in the natural sciences.<sup>35</sup> One way to deal with this problem is to bring young university students, graduates to basic and secondary schools, as an intermediary step in their professional careers. These students and young graduates could bring to basic education their knowledge about recent developments in their areas of study and work, and the strength of their enthusiasm, and would be a welcome alternative to so many worn-own and frustrated professional teachers. Today, this practice is restricted by the requirements that

<sup>&</sup>lt;sup>34</sup> <u>http://www.ie2000.cl</u>

teachers need pedagogical training, in addition to the specific knowledge on their areas of competence. But it could be argued that persons involved or coming out from higher education have already an implicit knowledge of pedagogy, and could be ready to teach young students with a limited amount of coaching and practical supervision.

The widespread use of practitioners from other disciplines, plus the adoption of advanced communication technologies, could short-circuit the need to wait for hundreds of thousands of students to go through the new higher education teaching courses, and to wait that these courses reach acceptable levels of quality. These new practices would transform the teaching profession very deeply. Most of the pedagogic effort would be concentrated in the first years of education, in the attention to groups at risk, in the preparation of good pedagogical materials, in the development of appropriate delivery systems, and in the assessment of results. Highly trained professional educators are likely to remain the leaders of this transformed educational environment, but they will have to deal with a much more fluid, complex and richer professional field.

# Conclusion

It is possible to summarize this survey on the perspectives of education for Latin America and the Caribbean by saying that the region will not reach the expected levels of educational development and maturity within the next fifteen years if it continues to follow the current trends. The economy will not grow very significantly; governments will not have much more resources; and the teaching profession will not grow and transform itself to correspond to the growing needs of quantity and quality in education. Lack of resources is not the only difficulty. There are serious problems with the ways education is provided, with the contents of courses, and in the ability of students to learn. The experiences of comprehensive educational reform, so far, have not been very inspiring. What is decided at the levels of ministries, technical assistance agencies and secretaries of education seldom reach the classrooms, or are reinterpreted according to traditional practices.

<sup>&</sup>lt;sup>35</sup> Simon Schwartzman, - O ensino superior no Brasil - 1998. Ministério da Educação, Instituto Nacional de Estudos e Pesquisas Educacionais - INEP, Textos para Discussão 6,

The panelists and participants in the Santiago workshop showed to be acutely aware of these difficulties, and most of their recommendations were directed to bring more resources to help to change this situation:

Financial resources: The bulk of basic education will continue to be public. Governments should increase their education budgets, and use them better. There will be hard choices to make: between higher or fundamental education, between general and technical education, among regions and risk groups. Private resources should also be brought in. Students and families who can pay for their studies should do so, particularly for higher education. Companies should be stimulated to provide grants and "adopt" schools.

Community resources: schools should be linked as much as possible with their local communities, benefiting from voluntary work, involving parents and teachers in the administration, and using their help to mobilize the families to bring their children to school and keep them there.

Technological resources - TV, Internet, computers, all these resources should be utilized whenever they can help to reduce costs, improve efficiency, and bring quality contents directly to the hands of schoolteachers and students.

Human resources: Bringing contents to students should not remain limited to traditional schoolteachers. Other professionals should be brought in, in person, as temporary teachers, or at distance, through the use of communication technologies.

Information resources: It is necessary to know better what schools are doing, what students are learning, how much money there is, how well this money is being spend, and how the population is being served. For this, governments should develop good-quality educational statistics, and systematic assessments of student achievement and institutional performance of schools, school districts, states and countries will have to be enhanced.

Intellectual resources: The field of education in Latin America and the Caribbean is teeming with ideas and suggestions for reform, and there are many good stories of successful projects and pedagogical experiences. However, we do not know enough about the experiences of different countries, the long-term results of specific policies, or the real validity and possible usage of student assessments. We have just a general idea of how the education budgets are spent, and do not know much about the private contributions to education. To learn about these and many other issues, we need good quality research and graduate students working in areas related to education. It is a matter for pedagogues and education specialists, but also for psychologists, economists, psychometricians, sociologists, political scientists and demographers. Modern, high quality educational research is not particularly expensive, but can play a very central role in the development of education in the region, by raising issues, questioning doubtful policies, and helping to point out the way.

Rio de Janeiro, September 17, 2000

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