

THE NEW CENTURY'S CHANGE: NEW CHALLENGES AND CURRICULUM RESPONSES

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After the fall of the Berlin wall and the increasing pace of globalization, the world began to perceive a culture change comparable to that of the fifteenth century, which saw the convergence of urbanization, of the development of a meritocracy in the class structure, of industrialization and of the linguistic and communications revolution based on the writing down of numerous languages and the introduction of the printing press.

The present culture change also comes from the convergence of a number of transformations in practically all human activities which gives the totality greater breadth and depth than the simple sum of each one. In this totality, people once again become aware of the place of knowledge and education in societies, of the opportunities they open up (Toffler, 1990; Thurow, 1996), and of the risks involved in how they are currently distributed (Tedesco, 2000).

This presentation is an attempt to reflect on the challenges of the contemporary culture change for education systems and established institutions, particularly from the standpoint of the curriculum and the attempts to reform it in the short and medium term. It makes no claims to originality, but rather to bring a discussion up to date. It is organized in four parts. The first part provides some material on the above mentioned trends and on the challenges they represent for education. The second part attempts to systematize some of the more dynamic responses being developed to meet them, the third goes further into some aspects relating to the curriculum changes among those responses and the fourth and last presents some of the tensions and conflicts that surround attempts to construct such responses. Finally, there is a reflection on a recurring debate: in the light of so many new challenges: is it worth while to keep trying to reform schools?.

1. Trends in contemporary development and educational demands.

The current culture change raises at least six new educational demands associated with the same number of converging trends for change: i) educating active rigorous and flexible individuals, rather than skilled workers for pre-established jobs, ii) counterbalancing the increasing inequalities and their consequences in terms of poverty and marginalization, iii) treating diversity as a valuable resource different from inequality, iv) educating to recreate politics, v) preparing to face an increasingly broad spectrum of personal decisions and vi) preparing for both the introduction and prevention of the paradoxical effects of technical progress.

Educating active individuals in a context of significant change.

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At least five economic processes are occurring throughout the world. The first is the reduction in the volume of work available and even necessary to satisfy societies' basic needs. This means it is possible that the young people who are being educated today may experience an increasing delay in their entry into the labor market and go through periods of unemployment or under-employment. The second is a growth in jobs in the service sector compared with the farming and industrial sectors. The third is the growth in informal as opposed to formal employment. The fourth is an increasing change in the profile of occupations, particularly with regard to specific skills, and the fifth the change in the scales on which individuals' job opportunities are decided.

The concepts of globalization and transnationalization of the labor market refer to the current manifestations of changes that began a long time ago, but have increased in pace in recent times. Globalization and transnationalization of labor mean, among other things, that both capital and companies and workers are able to move from one country to another in order to better "match" the requirements and availability of their mutual capabilities and opportunities.

These economic processes present different challenges to education. The reduction in the volume of work available puts on the agenda issues of postponing entry into the labor market and the extension of compulsory education, now definitely covering educational provision for young people and adolescents (Braslavsky, 2001). On the other hand, the speed of change in occupational profiles increasingly renews the old teaching demand of teaching how to learn, making it into a socio-economic and personal imperative, at the same time as the failure to create jobs in the agricultural and industrial economies leads to a rethinking of education for work and to a demand for strong links with education for the service sector and white collar jobs even in connection with production of agricultural and industrial goods. Finally, the growth of the informal compared to the formal sector of the economy leads to the assumption that it is very important for all young people to learn entrepreneurial skills.

Together these new economic trends and the results of international studies, showing which systems are guarantying a higher level of basic competence (OECD, 2001) make it necessary to examine in depth the identity of the different educational levels and the issue of early specialization. Furthermore, the economic changes also make it necessary to rethink ways of responding to the demand that education, and particularly secondary education, should be articulated with the economy. Is it necessary, possible or even desirable for education to agree to educate for the labor market when this market appears to be unable to accommodate all the young people who graduate from the system?

During the last decade, the position that formal education should not accept the challenge of training for the labor market as it is organized at a particular point, but rather training for work, has gradually gathered strength. It is likely that we should even propose that education – all education – should educate for multiple activities (Gorz, 1998): for productive work, for cultural creation, harmonious social life, family life, etc.; and – unlike what happened throughout the twentieth century – for alternation between periods where one or other type of activity predominates throughout the same individual's life. If this is so, it would also be necessary to simultaneously consider how to resolve the issue of training for specific jobs requiring specific skills, even though such jobs may disappear or change very quickly.

Counteracting social inequalities and challenging violence.

On the other hand, one of the most complex and least predictable features of the new economic developments is the deepening of already existing social inequalities and the emergence of new ones. According to various authors, in contemporary societies the situation individuals start from will be increasingly relevant as a determining factor in their future. Social mobility will be very weak and the differences in the chances of children and young people accumulating educational capital will mean that the inequalities in their futures will be even greater than when they started out (Fitoussi & Rosanvallon, 1997). In such conditions, it will be very difficult to meet the challenge of living together, of economic growth and democracy. Everyday violence might rise constantly, turning into a kind of permanent guerrilla warfare, though without a political purpose of social reform or revolution (Rifkin, 1996).

Although it is difficult to think that this kind of situation can be counteracted exclusively through educational decisions, in this context it seems particularly relevant to design educational structures and processes that at least attempt to provide equivalent educational opportunities by taking into account where people start from and constantly challenging the assumption of the irreversible structural determination of educational fate, even in the knowledge that achievements will have their limitations.

The structure of education systems by levels in the nineteenth and twentieth centuries assumed that the elites did not require education related to the production and distribution of goods and services and that manual workers, even those with intermediate and higher qualifications, did not require training to improve their knowledge of the workings of society and the economy or to broaden their cultural horizons. But recent scientific and technological advances are gradually transforming occupations so that manual jobs will tend to disappear as an option for earning a living due to the use of robotics in broad sectors of economies; while in other sectors very old-style economies will be maintained. Those who remain in these economies are unlikely to have opportunities to improve their quality of life.

In fact, everything indicates that work associated with opportunities for a better quality of life will require a solid, but fresh, intellectual education and an equally solid, and also fresh, orientation to problem solving, that is, towards action. This context provides a threefold challenge: i) to achieve a better distribution of the few existing good jobs, ii) to promote the construction of bridges between these and other jobs with less incorporation of technical progress and iii) to facilitate the transformation of jobs in the “old-style” economies into jobs that incorporate technical progress and a better quality of life.

To be able to deal with these three challenges systematically and with minimum impact from possible paradoxes means that all individuals should develop the necessary competencies for working in a context of technical progress and dealing with its consequences. Also, a feature of these challenges— we venture to repeat yet again – is their international character. The fact that technology facilitates mass migration, the construction of an ideology of freedom of movement to meet the needs of the economy and the legitimization of individual mobility and the increase number of “job-nomaden” (English, 2001) demand that this be quickly understood and dealt with through increasingly international educational policies.

The combination of a sound general education with humanistic, scientific and technological components and pedagogical methodologies of contextualization will be the only alternative for all adolescents and young people to be able to gain access to the kind of jobs that can guarantee a better quality of life and for which they will have to know how to both think and act. It is therefore necessary for all the possible educational routes to contain humanistic and technological components on the one hand and opportunities for a contextualized education for problem solving on the other. This combination will also make it easier for everyone to think better and act better. In fact, there would seem to be increasing empirical evidence in the world that the combination of these two types of learning strengthens the quality of each of them and makes it possible to seek new solutions to currently unresolved problems.

The challenge of counteracting inequalities also requires a more solid value-based education. In fact, the existence of these inequalities requires the construction of elements to enable individuals to understand and accept the need for cohesion and reject social polarization. In other words, education should promote the construction of a strong collective awareness that an unequal, arbitrary distribution of opportunities for access to economic, social and cultural goods does not simply mean an infringement of the human rights of some, but a risk to the survival of us all.

Dealing creatively with diversity.

Historically, education systems were intended to “transmit the culture of the older generations to the younger generations”, even more so in the case of secondary education than primary. This position was based on five currently debatable assumptions. The first one is that the younger generations lack their own culture and consequently provide no kind of resistance to the learning of contents and the adoption of adult cultural standards. The second is that all adult culture is the same. The third is that all younger generations are also identical, the fourth that adult culture and, as a part thereof, the characteristics of production and the structures of knowledge are stable over time; and the fifth is that education systems and schools are the main expert system in the transmission of information (Brunner, 2001).

During the last few years there has been a recognition of cultural heterogeneity and of historically subordinate cultures, particularly native cultures. Consequently, in many countries there has been a demand for attention to be paid to this diversity, and greater emphasis on such issues as the teaching of native languages as part of the curriculum (Naumann, 2001). Where this fails to happen there are grave conflicts leading to genocidal wars and underlining the need for such recognition.

In many countries there is a growing emergence and strengthening of youth cultures, through production and consumption outside the school environment. Some research findings show that the secondary school model’s unsuitability to the characteristics of the new social groups and sectors now attending, plus the lack of consideration for young people’s own particular needs and demands, are significant causes of dropping out and low learning achievements among adolescents and young people.

This means that if children and young people are to attend, remain and learn in educational institutions, they have to find there opportunities to take a leading role through a wide variety of practices that will enable them to make schools reasonable environments to live in (ICE, 2001). Moreover, these children and young people are not a homogeneous mass,

but groups of people with diverse interests, needs and knowledge, that sometimes coincide with and sometimes diverge from both those of adults and from each other.

On the other hand, secondary education arose at a stage when knowledge was structured in academic disciplines considered to be quite separate. With the emergence of a new scientific and technological system (Lesourne, 1993), the limits between academic disciplines are constantly blurred and redrawn and there are strong internal articulations which are, however, only short-lived. In this context, broad disciplinary fields structured during the second half of the twentieth century have been left out of secondary education and disciplinary fields of dubious relevance still remain within it.

Finally, the communications revolution opened the way for new expert systems in the transmission of and access to information which are much more effective than education systems and schools (Palloff & Pratt, 1999; Harasim, Hiltz, Teles & Turoff, 1998). It is therefore indispensable for educational institutions to consider the risks and opportunities for them of these new expert systems, particularly through the emergence of the concept of connected intelligence (de Kerckhove, 1997).

There is a particular appeal – and at the same time conflict – in the idea that education policies should take on the responsibility of reinventing processes of institutionalization in situations where lack of institutional participation (Castells, 1997) involves serious risks to personal development, social cohesion and peace. At the same time, it is vital for one of the hubs of this reinvention to be the recognition of diversity and change, of multiple circuits of creation and circulation of information and knowledge, and the existence of multiple, yet multi-dimensional, personalities.

Preparing for the reinvention of politics.

On the other hand, in the last few decades a large number of countries have undertaken processes of democratization (PNUD, 2000). At the same time, broad social sectors living in democratic regimes are seeking alternative ways of practicing politics, in the sense of all definitions and actions relating to the public sphere. These initiatives are associated both with crises of representation and the legitimacy of particular ways of practicing politics, with the changes in modes of economic participation, with the increase in social exclusion, with the restructuring of the world of communications. All this has given rise to the model of “market society”. According to some actors everything is negotiable, energy is exclusively directed at developing individualistic strategies for success (Giddens, 1994; Reich, ...) which resist collective commitments and produce malaise and disenchantment (Lechner, 1999). Others, however, consider that other ways of participating are emerging, linked to consumption as a way of exercising power (Minc, 2000).

In any case, all the hypotheses involve the need for a thorough reconsideration of politics, democracy and their relation to education. Some decades ago, when seeking articulations between democracy and education, the former was associated exclusively with institutional forms of democratic liberalism. In this context, the educational challenges consisted basically of educating the electors and the representatives and officials of a democracy.

Currently, the possibilities of overcoming the malaise and disenchantment have to do with broadening the concept of democracy or transforming it into one that is powerful enough to reconstruct collective commitments based on social practices historically identified as such

and economic practices that are becoming increasingly important for society. It should also be associated with the new cultural contexts where liberal democratic parliamentary regimes taken from a long Western history and tradition have been adopted, but are not necessarily relevant, for example, in Africa (Lipset, 2000).

This scenario increases ambitions with regard to the contribution education can make to democracy. The very concept of democracy has incorporated as its core value the defense and fostering of human rights and of new social, economic and individual rights. With this broader concept, new issues are figuring ever larger on the agenda and as challenges for education. Some of these are human rights from a conceptual and practical point of view, respect for difference and the integration of young people with special educational needs.

Young people seem to find themselves torn between an apparent disenchantment with politics and a dynamism in the ways they participate through public manifestations and joining social, cultural and religious movements that attract a greater number and variety of institutions and individuals, and thus gainsay the accusation of supposed apathy by those for whom the only legitimate means of political participation are the typical methods of the party political system of their generation. (Beck, 1993; Musel, 2001).

The chances of these new means of participation finding fresh institutions and establishing themselves in areas appropriate to the supportive, shared promotion of a better quality of life also depend to a significant degree on individuals with the appropriate capabilities and values, whom it takes more time and new conceptions to educate.

Preparing to take more, more varied and more complex personal decisions.

The discoveries in biology and the confrontation of different family structure throughout increasing by internationalised media are some of the recent phenomena leading to a broadening and a qualitative change in the spectrum of individual decisions (Rifkin, 1998).

The biological possibility of reproduction through mechanisms with increasing involvement of devices and technological contrivances and decreasing involvement of an act of love between individuals will – from an objective point of view – enable decisions to be made differently with regard to individuals' and their descendants and the reproduction of the species as such. Cloning, still imperfect (and with unpredictable consequences), will gradually be perfected and have more predictable results. But, just as genocidal war is a technological possibility not practiced globally in principle, there is nothing to indicate that individuals will prefer to be cloned rather than having a family. In any case, it does seem that the options regarding type of family structure will in some cultures be increasingly varied: couples with ever greater differences in age, polygam families, homosexual couples and others that perhaps cannot even be imagined today, will increase in frequency.

Incorporating technical progress and avoiding its paradoxical effects.

The broadening of the spectrum of issues on which decisions can and must be taken is not linked only to the personal sphere, in the sense underlined in the previous section; it also has to do with environmental issues.

In fact, a large number of technological advances have meant short term improvements in people's expectations regarding life expectancy and quality of life. This is connected with

processes that also have many paradoxical effects. They include, for instance, the increase in agricultural production through the introduction of fertilizers, the indiscriminate use of oil and other non-renewable sources of energy and the invention and large scale administration of antibiotics with no knowledge of their consequences. Furthermore, they have taken place in a political and social context in which social policies are reaching their limits. For example, when paid retirement was introduced in Prussia, life expectancy and the possibility of working ended around the age of 60. When this concept spread to broad regions of the world, nobody would have expected the developments in life expectancy. Today, advances in biology and medicine offer the possibility in some areas of the world of ever more people living to 100 years old and enable us to glimpse a horizon of 150.

The rising trends in life expectancy and the quality of life are threatened by the paradoxes of the very technical progress and social organization that made them possible. There is increasing anguish in this respect (Senneth, 2000) and the people educated in education systems that developed under the protection of unrestricted and unprotected environmental exploitation and in the imagined societies of the second half and of the XXth century find no way of reinventing either of these conditions.

These trends make it imperative to include the fostering of historical awareness and creativity as central hubs of education.

“Historical awareness” is, according to some authors, the cornerstone of a world morality (Pandel, 1991), since it provides the capacity for a future-directed self-orientation. It can also be proposed as one cornerstone for personal identity.

Creativity is the capacity to invent new solutions. Without an ethics of responsibility and solidarity, creativity may contribute to the death of mankind. Education for creativity is extremely complex. It includes the fostering of divergent thinking, the rigorous learning of current procedures that are known to be ineffective in order to make innovations in them, the capacity to anticipate, a sense of aesthetics, knowledge of a variety of verbal and non-verbal languages and the combination of different ways of thinking and sensitivities.

The educational structures invented for the XIXth century and the curricula set for the repetition, not just of an idea or a concept, but of a whole economic, social and knowledge paradigm, are reaching their limit. The relationship with nature and the modes of social organization that made possible the advances of the eighteenth and nineteenth centuries are threatened by globalization and its consequences and by technical progress and its paradoxes. These are providing the necessary guidance to educate individuals so they can undertake changing activities over more than 100 years, to counteract inequalities and challenge violence by incorporating technical progress, but reducing its paradoxes.

2. Educational changes at the turn of the century.

In the context of the above mentioned trends, it is possible to identify a set of proposals and policies for reforms in progress in different national education systems, based on an awareness of the demands indicated and a political will to seek responses. These proposals and policies vary from region to region.

Unfortunately, in the countries with the greatest concentration of poverty the responses tend to reproduce Western nineteenth and twentieth century educational structures and to a

large extent their curricula too, with no clear awareness that these have run their course, or to adopt practically wholesale aspects of the new solutions proposed for the West after over 100 years of successful educational development. They are guided by their anxiety over the increasing global inequalities and their ambition for inclusion. But it is unlikely that these strategies will make a clear contribution to improving their comparative situation.

On the other hand, in modern societies (United States, Europe, Japan, Australia) and in Latin America and other areas with intermediate modernization, a set of trends for change are spreading, relating to all aspects of education systems, including structures, curricula and organization. From the structural point of view the three most important trends in the so called “modern societies” are: i) education systems organized in exclusive levels that are difficult to move between are being replaced by education systems organized in inclusive cycles that are easy to move between, ii) types of secondary education organized according to the classic economic sectors of the first half of the twentieth century are being replaced by a continuation of basic education including options in line with the wide variety of interests of young people, iii) the early vocational training associated with some of these types are being replaced by modular technical and vocational education alternatives that are parallel or successive to the last period of basic education (still called higher secondary education and corresponding in general to years 10/11 and 12 of compulsory schooling)

Primary and secondary education originated as two self-contained alternatives for the subordinate or ruling sectors respectively of European society. Their inventors did not conceive them as two parts of an educational system structured in levels, but as two segments in an educational system structured along parallel lines for a society of separate classes, which could be illustrated as superimposed blocks practically lacking interconnections or possibilities of movement from one to the other.

The emergence of the European middle classes and the progressive transformation of that closed class society into a pyramid of classes with opportunities for upper mobility, which occurred from the mid-nineteenth century and accelerated after the Second World War until the ‘70’s, stimulated there a long period of re-shaping or reconstruction of the education systems. This re-shaping was based on the positioning of secondary education as a continuation of primary education, superimposing two very different institutional models without a thorough re-design of either of them (Muller, Ringer and Simon, 1992).

Within the secondary level, this re-shaping was through specialization of secondary education in different institutional types that coincided with the sectors of the mature industrial economies and were intended to train for the occupations of those who belonged to the middle class.

Only in the ‘50’s did a long-term “comprehensive school” become significant in Europe (Hargreaves, 1982). That proposition arose from the first diagnoses regarding the “scientific and technological revolution”, from the intuition of progressive changes in the structure of occupations and the desire to promote a redistribution of work opportunities and credentials for entry to society.

Although the proposal for the comprehensive school was strongly resisted at the beginning, it gradually increased in importance, providing both bridges between different educational courses and processes to achieve parity in the initial years of a long secondary

education. The comprehensive school is part of the great economic, social and education success in the Nordic countries (OECD, 2001).

Weighing up successful innovations and proposals with low impact in the '60's, '70's y '80's started a trend to dissociate job training from secondary education, tending to foster the transfer of the former towards NGOs, enterprises and higher education. Australia was one of the pioneers in this sense.

If this trend continues homogeneously, there are at least three risks. The first one, as has been suggested in part, is that Africa, Asia or Latin America will reproduce institutional models that have no connection with their economies and societies, the second that – particularly in countries where there is more poverty- all free provision of work training for jobs requiring limited skills will disappear. The third is that opportunities will be denied to young people from the lower classes who learn better through pedagogical methods contextualized in action.

At the same time, “school autonomy” was promoted, it taking some time to develop along two different lines. The first in time is related to fostering freedom of choice. The second is associated with stimulating pedagogical creativity. The latter gradually adopts other names: “self-management”, “self-administration,” “autonomy of means but not ends”.

During the early stages of promotion of school autonomy, little attention was paid to issues such as evaluation, information, curriculum and the education of new professional profiles for a new way of carrying out educational policies and practices. Behind this lack of attention, there was, in our opinion, a loss of meaning of the purpose of education in general and of secondary education in particular. As awareness spread of the importance of national competitiveness in the context of globalization, of technical progress as a factor in national competitiveness and of the education variable as a relevant factor for introducing technical progress; greater attention was paid to the mechanisms for controlling the quality of education and the construction and dissemination of information. Consequently, in several countries where there were no systems for administering standardized tests to students or procedures for publishing the results, these systems were set up. The assumption was that a public with greater information available could make better individual decisions —taken as a whole—would improve the collective situation.

3. The curriculum as the hub of educational change.

Towards the end of the twentieth century it became evident that regulating would not in itself guarantee better educational quality; this would have to be fostered. Therefore, the curriculum as the guiding framework for promoting education was gradually repositioned as the hub of debate and of educational reform. Currently, curriculum issues in one shape or another are the focus of reflection, debate and educational policies for everyone. What to teach? How to organize proposals? How to reconcile the demands resulting from all the above mentioned trends? How to advance in countries where there are so many differences? Within the framework of these initiatives, progress has been made in four directions: i) reinventing the very concept of curriculum and rethinking what its characteristics should be, ii) diversifying the methodologies used to draw it up, iii) introducing changes in the aspects governing school courses, i.e., structural issues and iv) introducing changes in the proposals for contents and teaching methodologies.

The reconceptualization of the curriculum as a dense, flexible contract between politics/society and teachers.

Traditionally the documents governing the educational processes were the plans and syllabi programs. The study plans defined the disciplines to be taught, their relative weight in terms of hours and weekly scheduling spread equally over a whole academic year. The syllabi defined the contents to be taught in each discipline, firstly only as data or concepts and then in some cases also as procedures, for example for natural sciences by the inclusion of certain laboratory methods. The latter gradually incorporated the concept of objectives to which the contents should respond. In the case of the primary level, the resources and activities to be used were also added. In the case of the secondary level, in many cases a reference bibliography was added. In both levels, there were some elements relating to the evaluation of pupils' learning.

Both plans and syllabi were in a sense poor, inflexible mechanisms. This means that they only related to some of the elements involved in education processes and did so by defining inflexible guidelines. As awareness grew of the need for a new kind of regulation, attempts were made to develop a conception of a new type of guideline: the curriculum. The curriculum is conceived both as a tool for classroom work and as a contract or transaction between what society expects schools to offer and what their authorities accept it should offer in terms of contents to be taught and institutional experiences to be provided.

As a reaction against the inflexibility of the plans and syllabi in many countries – and most teaching – emphasis was placed on their being flexible, thus enabling the deployment of the pedagogical creativity expected in the context of increased school autonomy and resulting in the required individual creativity.

But flexibility was confused with poverty. The poverty or richness of a curriculum correlates with its density. In fact, the density of a curriculum refers to the number of elements it provides to facilitate institutions' self-administration, get away from homogenizing, paralyzing uniformity, but at the same time avoid anomie. A curriculum is dense when it contains elements relating to all the variables schools must make decisions on. Its flexibility or otherwise are functions of its elasticity and have nothing to do with its high (rich) or low (poor) density. Flexibility is developed by how the curriculum relates to each of the dimensions decisions must be taken on. A rich curriculum, for example, provides criteria and examples; but not single pieces of information to be memorized or single activities to be replicated. It also provides teaching hours, but given as minimum and maximum values and over long periods, not as inflexible weekly weighted numbers of hours.

Many of the curriculum changes that confused density with elasticity had a large number of paradoxical effects. In the desire to de-mystify the old prescriptions and to deal with diversity, they offered broad, open ideas, written in the style of a good essay on pedagogy. But in practice, schools could not handle open mechanisms like this.

The instruction "give freedom" to schools to choose their educational contents and methodologies left them bereft when faced with very complex, changeable situations. The result was not the expected creativity, but anomie and, in many cases, a step backwards in the quality of students' learning.

With the awareness of some of the processes mentioned in the first section, particularly the increasing inequalities, during the last few years many governments in charge of curriculum design have decided to attempt a new kind of curriculum construction through new transactions. This initiative is taking place at the same time as attempts to provide curricula with greater legitimacy and quality by modifying their development processes.

The new curriculum development processes.

The teaching plans and syllabi used to be produced by small technical teams. The underlying assumption was that they were legitimized by two characteristics of these teams: i) having been chosen by the political authorities and ii) their expert knowledge, linked to the disciplines and teaching methodologies.

The massification of education and the increasing lack of satisfaction in the context of the growing lack of adjustment between educational needs, demands and processes led those responsible for developing curricula to design new mechanisms for constructing these new guidelines.

The new guidelines attempt to deal with several of the phenomena mentioned in the first section, for example the fact that currently many types of knowledge are developed not in the academic world, but in the world of material and symbolic production (companies of all kinds, spiritual movements, musical movements, etc). The hub is the incorporation of new actors in the curriculum construction processes.

These new mechanisms seem to be more frequent where political legitimacy is weaker and less able to transfer part of that legitimacy to the professional technical teams appointed by the public authorities or where there is strong awareness of the need to break with educational traditions and it is decided that highly charged educational decisions for the future cannot be left in the hands of the corporation that is part of everything being questioned, i.e. the teachers.

Based on this process, a large number of countries, for example Argentina (Braslavsky, 1998), Malta (Macelli, 2001), Slovenia (Strajn, 2000) and recently Germany (Forum Bildung, 2001) designed complex consultations including businessmen, students, church representatives, etc. Some of these processes relate to the curriculum of basic and secondary education. Others take curriculum aspects, but are part of broader processes of reflection and reconsideration of education as a whole.

The outcomes of these processes are usually reasonably stable, incorporate attractive balances between conceptual updating on the one hand and value orientation on the other but, on the other hand, it is not known to what extent they manage to get to grips with daily life in schools. In any case, both these outcomes and those developed through less participatory processes but with strong professional backing in stable societies (Rosenmund, 2000) also share other characteristics we will now consider.

The new curriculum outcomes

The new curriculum outcomes tend to coincide in a number of general aspects and in a set of guidelines for each area of knowledge or discipline.

With regard to the more general aspects, at least four points of convergence can be indicated: i) to orient all education towards the teaching of competencies ii) to attempt to reduce fragmentation by fostering inter and multi-disciplinary practices iii) to introduce options for pupils in systems where they did not exist before, iv) to restore project teaching.

Awareness that knowledge is outdated and of the need for “education [to be] what is left after everything learnt has been forgotten” is fostering a very intense search for identification and the practical development of “competencies”, which does not always advance in the same direction. While in the most modern countries and in situations where there is greater likelihood of humanistic traditions what is understood by competencies are people’s abilities to act and think at the same time and there are developments that generate creativity and historical awareness by fostering higher intellectual skills; in others the emphasis is placed on the so-called “life skills”, which might restrict those educated according to this philosophy only to local, well-known issues. In any case, it should also be recognized that this orientation is an improvement on the ineffective traditional verbose teaching methods

The awareness of the inadequacy of short academic periods and the provision of unconnected pieces of information has led to the creation of subject areas instead of disciplines. Sometimes superficially, without conviction on the part of the teachers and without them being suitably prepared, it is proposed to replace, for example, history, geography and sociology by an area called “social sciences”. In many cases, the teachers, particularly in secondary education, resist this. They produce counter proposals within school micro-politics. Nothing changes.

In some countries and for some topics, the margins for pupil choice grow organically, in a stimulating fashion and in line with the increased opportunities for participation in the globalization processes. Australia, for example, some years ago introduced a program called “A hundred languages other than English”, which orients the inclusion in secondary schools of languages as diverse as Japanese, Thai or Tagalog. But at the same time, some countries reduce the language spectrum to teaching the native and national languages, as in the case of Bolivia; or the national language and English, as in the case of Oman. The consequences of each option are not clear. The comparative advantages of those with English as their mother tongue are evident and difficult to offset.

The restoration of teaching by projects, invented at the end of the nineteenth and early twentieth centuries in European private schools and transferred from there initially without success to state schools, seeks to promote creativity, the entrepreneurial spirit. Where teachers have a solid cultural education and where there are appropriate resources or promotion mechanisms it has a clear impact on students’ education. This is the case of a large number of secondary schools in Portugal, France, Holland, or Chile. But where these features are absent, this time that could be used for basic instrumental learning for which some primary and secondary teachers may well be prepared also produces paradoxical effects. The time devoted to projects turns out not to be time for learning, but for social interaction, sometimes more and sometimes less productive of learning in communication and in the values of solidarity.

Other changes relate to the approaches to each discipline. In many countries on all continents progress has been made into communicational approaches for teaching languages. In mathematics, formalistic proposals have given way to contents linked to probability, statistics and the uses of mathematics for setting up interpretative models. In social sciences, proposals for teaching processes have gained ground over the transmission of information.

There have been more frequent efforts to initiate children in multi-perspective approaches and in handling controversy. The concept of scientific literacy has been constructed. There has been progress in environmental perspectives. In physical education, militaristic approaches have been abandoned. In arts education the idea of production and creativity is promoted more energetically.

The changes in the approaches to each discipline are equally as difficult to put into practice as the four general changes selected. There are large numbers of indications, but still little systematic research evidence. Neither is there sufficient research into the conflicts that exist “just” to bring about changes in orientation.

4. The conflicts from renewed curricular transactions

The expansion and changes in education, particularly curriculum changes, generate multiple conflicts throughout the world, which also differ from country to country; some of them have been referred to in the course of this text. Others have not.

These conflicts can be organized in three broad groups: i) those more related to tensions between education and development models, ii) those more related to the new visions of education and traditions and iii) those more related to the organization of the public institutional apparatus and to its ways of promoting changes in education.

Among the conflicts most closely related to with the tensions between education and development models the most common are: i) between the need to organize spaces for entry and learning for all and budgetary constraints; ii) between certainty about a world of changing activities that requires a polyvalent education and the immediate needs for education for trades in the current formal and informal economies, iii) between the contents required by globalization and the opening up of economies, such as English, and the contents required by the claims to diversity and identity by native peoples, such as their own languages and iv) between the recognition of the need to transform secondary schools into real schools for real children and young people and the fear of those same children and young people which is becoming established in many societies.

The teachers and the old teaching models are at the heart of the conflicts most closely related to the tensions between the new visions of the education of young people and the traditions of secondary education, for example: i) between the need to transform the structure of levels and types of education and secondary school organization into disciplines and ii) between the conviction and the desire to change on the part of teachers and their fear of losing acquired working rights in the context of medium and long term trends which in recent times have led to periods when they have experienced reductions in their real wages, iii) between proposals for educating for competencies and the knowledge held by primary and secondary teachers, who find the proposals attractive but recognize that “they do not know what to do” and iv) between increasing demands and investment in teacher training and education and the use of reiterative, backward methodologies that are not in line with the proposals for curriculum change.

Finally, there are a number of tensions related to the need to free the teaching creativity of teaching institutions, communities and staff, while at the same time strengthening national States’ capacity to guide and promote. In fact, an analysis of the educational reforms of the ‘80’s and the ‘90’s in several countries made it evident that if educational quality and equity

are sought, the Ministries of Education have to be renewed and empowered to guide the reform of the education systems and institutional innovation and to promote that creativity. In this sense it is necessary to find also new institutional forms for public administration that stifle the creativity of educational institutions, communities and staff. The reforms that are being carried out sometimes use old structures revived by very powerful personal leadership, short term investment programs, or transitory institutional structures. A maintenance or return to the heavy bureaucratic, routine-laden structures is not desirable, but neither is such a precarious institutional situation.

Final reflections.

The truth is that, with more or less tensions, educational changes and in particular curriculum changes are proceeding swiftly in documents throughout the world and in a far from insignificant number of educational establishments in several regions. Until the '80's it was rightly said that if a traveler from the eighteenth century woke up he would feel extremely disconcerted in all institutions except schools. Today this is no longer so. Now it can be said that it depends on the school he wakes up in.

He may find himself in Australia in a very orderly, almost self-run classroom, where 100 little 6-year old girls and boys learn under the guidance of teachers whose presence is hardly felt; in Canada in a secondary school classroom where young people are producing computer assisted designs; in the Andean cordillera in a hamlet of 2000 inhabitants in a state secondary education establishment where the young people are involved in a personal or collective entrepreneurial project for the production of vegetables and flowers, trout or jams that will then enable them to help change the quality of life of their families in an arid environment where lettuces had to be imported and which had been left with no source of income due to the low international price of wool. In Scotland, Holland, France or Norway, to name just a few countries, he would have a good chance of landing in this kind of institution. In some of the Gulf states he might be very surprised to see girls and boys working together sitting in circles trying to solve problems or learning English on computers. In Mozambique he might wake up in a Teacher Training College to the north of the capital organized in modular curriculum projects with the support of Danish international cooperation.

But he may also find himself in a school under a tree in any African country or in a well-equipped American school where meaningless words are repeated, myths -legitimate- are confused with science, or in another in any part of the world pervaded by intolerance, by a clinging to sterile, superficial tradition, by harsh, contemptuous criticism of others.

Diversity is there, in the daily life of education systems and despite the converging curriculum trends. Sometimes education seems to be constructed in the desired direction. But more often it seems to be a product derived from an explosive combination of inequalities that deepen with no intervention from educational policies, lacking a wise, effective overall educational strategy, following its own dynamics regardless of human will. Critical sociologists would say everything is bad. The official agents of education policies would say progress is being made. Research and analysis into the changes are faced with the challenge of producing elements for a balanced interpretation and a better international strategy in a world in which it is not ethical - or pragmatic - to globalize only trade and problems.

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